

No. 4.—*Type Specimens of Mammals in the Museum of Comparative Zoölogy*

BY GLOVER M. ALLEN

THE following list includes all specimens in the collection of fossil and recent mammals on which systematic names have been based, whether in whole (holotypes) or in part (cotypes), and whether such names are of valid forms (eutypes) or whether they are names currently regarded as synonyms (metatypes). It is intended to be complete to the close of the year 1930.

The greater part of the types are contained in the E. A. and O. Bangs Collection, which was acquired in 1901. Of fossil species (indicated by a dagger (†)), there are sundry types received from the J. D. Whitney Collection (mainly from California), as well as a few from the Brönn, Campiche, Duval and Eser Collections from Europe; also most of the types described by W. B. Scott and H. F. Osborn from material collected by S. Garman and others in the White River formation of Dakota in the early days of its exploitation. A few specimens of recent mammals received many years ago through exchange with the Smithsonian Institution, at a time when "duplicates" were freely disposed of, prove to be cotypes or even actual types, some of which were recorded as missing by Lyon and Osgood in their Catalogue of the Type Specimens of Mammals in the United States National Museum, 1909. Some of these have since been returned to the former owner and are not here listed.

The sequence of orders and families is as far as possible that of Miller's List of North American Mammals, 1923 (1924), supplemented by the check-list of Osborn (1905) for fossil groups, and that of Kellogg (1928) for the Cetacea. The species are arranged alphabetically under their respective families. In general, I have followed the method of Lyon and Osgood in giving first, the name under which each type was described, then the reference to the original description, followed by a brief statement as to the nature of the specimen, its Museum of Comparative Zoölogy number or Bangs Collection number (for the latter collection has been incorporated without change of numbers), the locality, date, and collector. Where the name in current use is different from that under which the specimen was described, the present-day equivalent is added.

No attempt has been made to list specimens of which additional mention is made in the original accounts (paratypes), nor of specimens that have been figured but do not form the basis of original descriptions (plesiotypes).

In all, the types or cotypes forming the basis of 299 names are here included. Some of them are more or less historic specimens, whose location has undoubtedly in many cases been lost sight of, so that it may be of value to make the present record.

### MARSUPIALIA

#### DIDELPHIIDAE

##### DIDELPHIS MARSUPIALIS PARTICEPS Goldman

Proc. Biol. Soc. Washington, **30**, p. 107, 23 May 1917.

*Holotype*.—Male, skin and skull, 8,439 (E. A. and O. Bangs Coll.). Panama, San Miguel Island. 8 May 1900. W. W. Brown, Jr.

##### DIDELPHIS VIRGINIANA PIGRA Bangs

Proc. Boston Soc. Nat. Hist., **28**, p. 172, March 1898.

*Holotype*.—Female, skin and skull, 3,500 (E. A. and O. Bangs Coll.). Florida, Brevard County, Oak Lodge, on the east peninsula opposite Micco. 31 January 1896. Outram Bangs.

##### MARMOSA FULVIVENTER Bangs

Amer. Nat., **35**, p. 632, August 1901.

*Holotype*.—Male, skin and skull, 8,435 (E. A. and O. Bangs Coll.). Panama, San Miguel Island. 28 April 1900. W. W. Brown, Jr.

##### MARMOSA MITIS Bangs

Proc. Biol. Soc. Washington, **12**, p. 162, 10 August 1898.

*Holotype*.—Male, skin and skull, 8,123 (E. A. and O. Bangs Coll.). Colombia, Santa Marta Mountains, Pueblo Viejo, 8,000 feet. 25 March 1898. W. W. Brown, Jr.

##### MARMOSA ROBINSONI Bangs

Proc. Biol. Soc. Washington, **12**, p. 95, 30 April 1898.

*Holotype*.—Male, skin and skull, 7,749 (E. A. and O. Bangs Coll.). Venezuela, Margarita Island. 12 July 1895. Wirt Robinson.

## PHILANDER CICUR Bangs

Proc. Biol. Soc. Washington, **12**, p. 161, 10 August 1898.

*Holotype*.—Female, skin and skull, 8,114 (E. A. and O. Bangs Coll.). Colombia, Santa Marta Mountains, Pueblo Viejo. 27 March 1898. W. W. Brown, Jr.

## PERAMELIDAE

## SUILLOMELES HISPIDUS G. M. Allen and T. Barbour

Proc. New England Zoöl. Club, **4**, p. 44, pls. 2, 3, 12 July 1909.

*Holotype*.—Skin and skull, M. C. Z. 7,006. Netherlands, New Guinea, Doreh Bay, Manokwari. 23 February 1907. Thomas Barbour.

## INSECTIVORA

## † NESOPHONTIDAE

## † NESOPHONTES MICRUS G. M. Allen

Bull. Mus. Comp. Zoöl., **61**, p. 5, pl., fig. 14, January 1917.

*Holotype*.—Posterior half of right ramus, M. C. Z. 9,600. Cuba, Province of Matanzas, cave in Sierra de Hato Nuevo. Carlos de la Torre.

## TALPIDAE

## NEUROTRICHUS GIBBSI HYACINTHINUS Bangs

Amer. Nat., **31**, p. 240, fig. 2, 1 March 1897.

*Holotype*.—Female, skin and skull, 1,240 (E. A. and O. Bangs Coll.). California, Marin County, Nicasio. 10 March 1894. C. A. Allen.

## SCALOPS ANASTASAE Bangs

Proc. Boston Soc. Nat. Hist., **28**, p. 212, March 1898.

*Holotype*.—Male, skin and skull, 7,192 (E. A. and O. Bangs Coll.). Florida, Anastasia Island, Point Romo. 16 February 1897. Outram Bangs.

= *Scalopus aquaticus anastasae* (Bangs).

**SCALOPS TEXANUS AEREUS Bangs**

Proc. Biol. Soc. Washington, **10**, p. 138, 28 December 1896.

*Holotype*.—Female, skin and skull, 5,475 (E. A. and O. Bangs Coll.). Oklahoma, Stilwell. 13 August 1896. Thaddeus Surber.  
= *Scalopus acreus* (Bangs).

**SCAPANUS CALIFORNICUS MINUSCULUS Bangs**

Proc. New England Zoöl. Club, **1**, p. 70, 31 July 1899.

*Holotype*.—Female, skin and skull, 9,189 (E. A. and O. Bangs Coll.). California, Eldorado County, Fyffe. 10 June 1897. W. W. Price and E. M. Nutting.

= *Scapanus latimanus minusculus* Bangs.

**SORICIDAE****BLARINA BREVICAUDA ALOGA Bangs**

Proc. New England Zoöl. Club, **3**, p. 76, 31 March 1902.

*Holotype*.—Male, skin and skull, 9,727 (E. A. and O. Bangs Coll.). Massachusetts, Marthas Vineyard, West Tisbury. 25 June 1899. Outram Bangs.

**BLARINA BREVICAUDA COMPACTA Bangs**

Proc. New England Zoöl. Club, **3**, p. 77, 31 March 1902.

*Holotype*.—Male, skin and skull, 9,705 (E. A. and O. Bangs Coll.). Massachusetts, Nantucket Island. 10 July 1899. Outram Bangs.

**CROCIDURA MAURISCA GEATA G. M. Allen and A. Loveridge**

Proc. Boston Soc. Nat. Hist., **38**, p. 417, 19 December 1927.

*Holotype*.—Adult male, skin and skull, M. C. Z. 22,447. Tanganika Territory, Nyingwa, Uluguru Mountains. 19 October 1926. Arthur Loveridge.

**CRYPTOTIS AVIA G. M. Allen**

Proc. New England Zoöl. Club, **8**, p. 37, 12 February 1923.

*Holotype*.—Skin and skull, M. C. Z. 20,091. Colombia, El Verjón. October 1922. Nicéforo Maria.

## NEOSOREX PALUSTRIS ACADICUS G. M. Allen

Proc. Biol. Soc. Washington, **28**, p. 15, 12 February 1915.

*Holotype*.—Female, skin and skull, 2,046 (E. A. and O. Bangs Coll.). Nova Scotia, Digby. 26 July 1894. Outram Bangs.

= *Sorex palustris gloveralleni* Jackson.

## SOREX ARANEUS ULTIMUS G. M. Allen

Proc. New England Zoöl. Club, **5**, p. 51, 9 April 1914.

*Holotype*.—Male, skin and skull, M. C. Z. 15,000. Northeastern Siberia, Nijni Kolymsk, near mouth of the Kolyma River. 6 November 1911. Johan Koren.

## SOREX MACROPYGMÆUS KORENI G. M. Allen

Proc. New England Zoöl. Club, **5**, p. 56, 9 April 1914.

*Holotype*.—Female, skin and skull, M. C. Z. 15,085. Northeastern Siberia, Nijni Kolymsk, near mouth of the Kolyma River. 19 October 1911. Johan Koren.

## SOREX PERSONATUS MISCIX Bangs

Proc. New England Zoöl. Club, **1**, p. 15, 28 February 1899.

*Holotype*.—Male, skin and skull, S,651 (E. A. and O. Bangs Coll.). Labrador peninsula, Black Bay. 10 October 1898. Ernest Doane.

= *Sorex cinereus miscix* Bangs.

## SOREX SANGUINIDENS G. M. Allen

Proc. New England Zoöl. Club, **5**, p. 54, 9 April 1914.

*Holotype*.—Female, skin and skull, M. C. Z. 15,012. Northeastern Siberia, Nijni Kolymsk, near mouth of the Kolyma River. 11 December 1911. Johan Koren.

## SOREX VIR G. M. Allen

Proc. New England Zoöl. Club, **5**, p. 52, 9 April 1914.

*Holotype*.—Female, skin and skull, M. C. Z. 15,068. Northeastern Siberia, Nijni Kolymsk, near mouth of the Kolyma River. 19 December 1911. Johan Koren.

## CHRYSOCHLORIDAE

## CHLOROTALPA TROPICALIS G. M. Allen and A. Loveridge

Proc. Boston Soc. Nat. Hist., **38**, p. 418, December 1927.

*Holotype*.—Adult female, skin and skull, M. C. Z. 22,435. Tanganyika Territory, Bagilo, Uluguru Mountains. 5 October 1926. Arthur Loveridge.

## CHIROPTERA

## PTEROPIDAE

## PTEROPUS ARIEL G. M. Allen

Bull. Mus. Comp. Zoöl., **52**, p. 28, plate, figs. 1, 3, 1908.

*Holotype*.—Skin and skull, M. C. Z. 10,565. Maldives Islands, Male Atoll. 24 November 1901. Henry B. Bigelow.

## PTEROPUS LANIGERA (SIC) Harrison Allen

Proc. Amer. Phil. Soc., **28**, p. 70, 1890.

*Cotype*.—Skin only, M. C. Z. 7,023. (The other cotype is in the United States National Museum, skull 37,815, skin 19,066.) Samoa Islands (error; probably from Caroline Islands, see Andersen, Cat. Chiroptera Brit. Mus., 1912, **1**, p. 298). H. A. Ward.

= *Pteropus insularis* Hombron and Jacquinot.

## EMBALLONURIDAE

## PEROPTERYX CANINA PHAEA G. M. Allen

Bull. Mus. Comp. Zoöl., **54**, p. 222, July 1911.

*Holotype*.—Female, skin and skull, M. C. Z. 8,101. British West Indies, Grenada, Point Saline. 29 August 1910. G. M. Allen.

## RHYNCHISCUS NASO PRISCUS G. M. Allen

Proc. Biol. Soc. Washington, **27**, p. 109, 10 July 1914.

*Holotype*.—Skin and skull, M. C. Z. 13,208. Mexico, Quintana Roo, Xcopen. 18 February 1912. James L. Peters.

## NYCTERIDAE

## NYCTERIS REVOILI Robin

Bull. Soc. Philom. France, ser. 7, **5**, p. 90, 1881; Ann. des Sci. Nat., Zoöl., ser. 6, **13**, art. 2, p. 3. April 1881,

*Cotype*.—Female in alcohol, M. C. Z. 14,929. Somaliland. 1880 ? Revoil.

## HIPPOSIDERIDAE

## HIPPOSIDEROS CURTUS G. M. Allen

Revue Zoöl. Africaine, **9**, p. 194, 1921.

*Holotype*.—Adult female in alcohol, M. C. Z. 19,305. Cameroons, Sakbayeme. 1920. Rev. George Schwab.

## HIPPOSIDEROS TURPIS Bangs

Amer. Nat., **35**, p. 561, 1901.

*Holotype*.—Female, skin and skull, M. C. Z. 10,003. Liu Kiu Islands, Ishigaki. 10 May 1899. I. Zensaku.

## PHYLLOSTOMIDAE

## AMETRIDA MINOR Harrison Allen

Proc. Boston Soc. Nat. Hist., **26**, p. 240, figs. 1–4, May 1894.

*Holotype*.—Male in alcohol, skull dry, M. C. Z. 11,274. “Locality unknown,” but probably Paramaribo, Surinam (see Proc. Biol. Soc. Washington, **15**, p. 88, 1902). 1832? F. W. Cragin.

## ARTIBEUS FEMURVILLOSUM Bangs

Proc. New England Zoöl. Club, **1**, p. 73, 24 November 1899.

*Holotype*.—Male, skin and skull, 8,314 (E. A. and O. Bangs Coll.). Colombia, La Concepcion, 3,000 feet. 21 March 1899. W. W. Brown, Jr.

= *Artibeus jamaicensis palmarum* Allen and Chapman.

## CHILONYCTERIS PARNELLII PUSILLUS G. M. Allen

Proc. Biol. Soc. Washington, **30**, p. 168, 23 October 1917.

*Holotype*.—Female, skin and skull, M. C. Z. 16,468. West Indies, Santo Domingo, Arroyo Salado. 7 March 1916. James L. Peters.

**CHILONYCTERIS TORREI G. M. Allen**

Proc. New England Zoöl. Club, **6**, p. 4, pl. 1, figs. 1, 3, 8 February 1916.

*Holotype*.—Female in alcohol, and dry skull, M. C. Z. 11,672. Cuba, Baracoa, La Cueva de la Majana. 15 June 1915. V. J. Rodriguez y Verrier.

**EROPHYLLA SEZEKORNI SYOPS G. M. Allen**

Proc. Biol. Soc. Washington, **30**, p. 167, 23 October 1917.

*Holotype*.—Male in alcohol, and dry skull, M. C. Z. 13,713. Jamaica, Montego Bay. 14 March 1912. Joseph A. Cushman.

**GLOSSOPHAGA LONGIROSTRIS Miller**

Proc. Acad. Nat. Sci. Philadelphia, p. 330, 1898.

*Holotype*.—Female, skin and skull, 8,046 (E. A. and O. Bangs Coll.). Colombia, Santa Marta Mountains. 10 February 1898. W. W. Brown, Jr.

**LONCHOPHYLLA HESPERIA G. M. Allen**

Bull. Mus. Comp. Zoöl., **52**, p. 35, plate, fig. 7, July 1908.

*Holotype*.—Male in alcohol, M. C. Z. 7,011. Peru, Zorritos. F. H. Bradley.

**VAMPYRODES MAJOR G. M. Allen**

Bull. Mus. Comp. Zoöl., **52**, p. 38, July 1908.

*Holotype*.—Female in alcohol, M. C. Z. 6,756. Isthmus of Panama, San Pablo (now covered by Gatun Lake). Allen Lesley.

**VAMPYROPS UMBRATUS Lyon**

Proc. Biol. Soc. Washington, **15**, p. 151, 20 June 1902.

*Holotype*.—Male, skin and skull, 8,180 (E. A. and O. Bangs Coll.). Colombia, San Miguel. 8 June 1898. W. W. Brown, Jr.

**VAMPYROPS ZARHINUS Harrison Allen**

Proc. Acad. Nat. Sci. Philadelphia, p. 400, 1891.

*Holotype*.—Female in alcohol, M. C. Z. 3,211. Panama, Obispo. 1872. Hassler Expedition.

(The locality is recorded as above in the museum catalogue. Harrison Allen, however, gives it as Brazil, from the Thayer Expedition.)  
 = *Vampyrops helleri* Peters.

#### THYROPTERIDAE

##### THYROPTERA TRICOLOR ALBIGULA G. M. Allen

Proc. New England Zoöl. Club, 9, p. 1, 10 December 1923.

*Holotype*.—Adult female in alcohol, M. C. Z. 20,143. Western Panama, Gutierrez, 25 miles inland from Chiriquicito. August 1923. Emmett R. Dunn and Chester B. Duryea.

#### VESPERTILIONIDAE

##### ATALAPHA BRACHYOTIS J. A. Allen

Bull. Amer. Mus. Nat. Hist., 4, p. 47, May 1892.

*Holotype*.—Male in alcohol, M. C. Z. 11,143. Galapagos group, Chatham Island. 23 June 1891. George Baur.

NOTE.—The skull had been removed and was missing when received.  
 = *Lasiurus brachyotis* (J. A. Allen).

#### CORYNORHINUS PHYLLOTIS G. M. Allen

Bull. Mus. Comp. Zoöl., 60, p. 352, pl. 1, figs. 5, 6, April 1916.

*Holotype*.—Skin and skull, M. C. Z. 5,943. Mexico, San Luis Potosi. 24 March 1878. Edward Palmer.

#### EPTESICUS PHASMA G. M. Allen

Bull. Mus. Comp. Zoöl., 54, p. 327, 1911.

*Holotype*.—Male, skin and skull, M. C. Z. 8,279. Kenya Colony, East Africa, Meru River (affluent of northern Guaso Nyiro). 6 August 1909. G. M. Allen.

#### HARPIOCEPHALUS RUFULUS G. M. Allen

Proc. Biol. Soc. Washington, 26, p. 214, 20 December 1913.

*Holotype*.—Male, skin and skull, M. C. Z. 14,206. Tonkin, Lao-kai. 3 January 1912. Kobayashi.

## MYOTIS ALBICINCTUS G. M. Allen

Journ. Mammalogy, 1, p. 2, 28 November 1919.

*Holotype*.— Adult male, skin and skull, M. C. Z. 11,747. California, Mt. Whitney, 11,000 feet. G. M. Allen.

= *Myotis lucifugus carissima* Thomas.

## MYOTIS SODALIS Miller and Allen

Bull. U. S. Nat. Mus., no. 144, p. 130, 1928.

*Holotype*.— Adult female, skin and skull, M. C. Z. 10,980. Indiana, Wyandotte Cave. 7 March 1904. J. O. Sibert.

## NYCTICEIUS AFRICANUS G. M. Allen

Bull. Mus. Comp. Zoöl., 54, p. 328, 1911.

*Holotype*.— Male, skin and skull, M. C. Z. 8,272. Kenya Colony, East Africa, Meru River (an affluent of northern Guaso Nyiro). 11 August 1909. G. M. Allen.

## PLECOTUS SACRIMONTIS G. M. Allen

Bull. Mus. Comp. Zoöl., 52, p. 50, pl., fig. 6, 1908.

*Holotype*.— Male in alcohol, M. C. Z. 6,932. Japan, Mt. Fuji. 4 December 1906. Alan Owston.

= *Plecotus auritus sacrimentis* G. M. Allen.

## SCABRIFER NOTIUS G. M. Allen

Bull. Mus. Comp. Zoöl., 52, p. 46, 1908.

*Holotype*.— Male in alcohol, M. C. Z. 4,555. South Africa, Cape Town.

= *Rhinopterus notius* (G. M. Allen).

## SCOTOPHILUS ALTILIS G. M. Allen

Bull. Mus. Comp. Zoöl., 58, p. 350, 1914.

*Holotype*.— Male, skin and skull, M. C. Z. 14,463. Sudan, Blue Nile, Aradeiba, above Roseires. 22 January 1913. Phillips Sudan Expedition, G. M. Allen.

## MOLOSSIDAE

## CHAEREPHON LEUCOSTIGMA G. M. Allen

Bull. Mus. Comp. Zoöl., **61**, p. 513, February 1918.

*Holotype*.—Female, skin and skull, M. C. Z. 16,344. Madagascar, Tananarive. December 1915. Frederic R. Wulsin.

## CARNIVORA

## † HYAENODONTIDAE

## † HYAENODON LEPTOCEPHALUS Scott

Bull. Mus. Comp. Zoöl., **13**, p. 152, fig. 1, September 1887; Journ. Acad. Nat. Sci. Philadelphia, ser. 2, **9**, p. 175, October 1887.

*Cotypes*.—Skulls, M. C. Z. 6,693, 6,694 (Bone catalogue). South Dakota, White River beds, Oligocene. July 1880. S. W. Garman.

## URSIDAE

## URSUS (EUARCTOS) AMERICANUS SORNBORGERI Bangs

Amer. Nat., **32**, p. 500, July 1898.

*Holotype*.—Young female (?), skull, 7,411 (E. A. and O. Bangs Coll.). Labrador, Okak. Summer, 1897. J. D. Sornborger.

= *Euarctos americanus americanus* (Pallas).

## PROCYONIDAE

## PROCYON LOTOR ELUCUS Bangs

Proc. Boston Soc. Nat. Hist., **28**, p. 219, March 1898.

*Holotype*.—Male, skin and skull, 3,502 (E. A. and O. Bangs Coll.). Florida, Brevard County, Oak Lodge, east peninsula opposite Micco. 15 February 1895. Outram Bangs.

## PROCYON GLOVERALLENI Nelson and Goldman

Journ. Mammalogy, **11**, p. 453, 11 November 1930.

*Holotype*.—Immature male, skin and skull, M. C. Z. 18,591. British West Indies, island of Barbados. 1920. Sir Francis Watts.

## PROCYON MAYNARDI Bangs

Proc. Biol. Soc. Washington, **12**, p. 92, 30 April 1898.

*Holotype*.—Male, skin and skull, 7,750 (E. A. and O. Bangs Coll.). Bahamas, New Providence Island, Nassau. August 1897. H. L. Claridge.

## MUSTELIDAE

## LUTRA DEGENER Bangs

Proc. Biol. Soc. Washington, **12**, p. 35, 24 March 1898.

*Holotype*.—Male, skin and skull, 6,965 (E. A. and O. Bangs Coll.). Newfoundland, Bay St. George. 23 April 1897. Ernest Doane.

## LUTRA HUDSONICA VAGA Bangs

Proc. Boston Soc. Nat. Hist., **28**, p. 224, fig., March 1898.

*Holotype*.—Male, skin and skull, 5,749 (E. A. and O. Bangs Coll.). Florida, Brevard County, Micco. 17 March 1897. F. R. Hunter.

= *Lutra canadensis vaga* Bangs.

## MEPHITIS AVIA Bangs

Proc. Biol. Soc. Washington, **12**, p. 32, 24 March 1898.

*Holotype*.—Male, skin and skull, 5,747 (E. A. and O. Bangs Coll.). Illinois, San Jose. 10 March 1897. H. H. and C. S. Brimley.

= *Mephitis mesomelas avia* Bangs.

## MEPHITIS MEPHITICA ELONGATA Bangs

Proc. Boston Soc. Nat. Hist., **26**, p. 531, 31 July 1895.

*Holotype*.—Male, skin and skull, 3,051 (E. A. and O. Bangs Coll.). Florida, Micco. 5 March 1895. Outram Bangs.

= *Mephitis elongata* Bangs.

## MEPHITIS MEPHITICA SCRUTATOR Bangs

Proc. Biol. Soc. Washington, **10**, p. 141, 28 December 1896.

*Holotype*.—Male, skin and skull, 2,889 (E. A. and O. Bangs Coll.). Louisiana, Acadia Parish, Cartville. 25 May 1895. F. L. Small.

= *Mephitis mesomelas mesomelas* Lichtenstein.

### MEPHITIS SPISSIGRADA Bangs

Proc. Biol. Soc. Washington, **12**, p. 31, 24 March 1898.

*Holotype*.—Female, skin and skull, 3,699 (E. A. and O. Bangs Coll.). British Columbia, Sumas. 30 September 1895. Allan C. Brooks.  
 = *Mephitis occidentalis spissigrada* Bangs.

### MUSTELA ATRATA Bangs

Amer. Nat., **31**, p. 162, 1 February 1897.

*Holotype*.—Female, skin and skull, 5,752 (E. A. and O. Bangs Coll.). Newfoundland, Bay St. George. 29 September 1896. Ernest Doane.  
 = *Martes atrata* (Bangs).

### MUSTELA BRUMALIS Bangs

Amer. Nat., **32**, p. 502, figs., July 1898.

*Holotype*.—Probably male, skull, 7,417 (E. A. and O. Bangs Coll.). Labrador, Okak. Summer, 1897. J. D. Sornborger.  
 = *Martes brumalis* (Bangs).

### MUSTELA CICOGNANII MORTIGENA Bangs

Bull. Mus. Comp. Zoöl., **54**, p. 511, July 1913.

*Holotype*.—Male, skin and skull, 3,745 (E. A. and O. Bangs Coll.). Newfoundland, Bay St. George. 27 September 1895. Ernest Doane.

### PUTORIUS FRENATUS NEOMEXICANUS Barber and Cockerell

Proc. Acad. Nat. Sci. Philadelphia, p. 188, 3 May 1898.

*Holotype*.—Male, skin and skull, M. C. Z. 10,475. New Mexico, Mesilla, shore of Armstrong's Lake. 1 February 1898. A. C. Tyson.  
 = *Mustela frenata neomexicana* (Barber and Cockerell).

### PUTORIUS (ARCTOGALE) LONGICAUDA ORIBASUS Bangs.

Proc. New England Zoöl. Club, **1**, p. 81, 27 December 1899.

*Holotype*.—Female, skin and skull, 9,058 (E. A. and O. Bangs Coll.). British Columbia, source of Kettle River, 7,500 feet. 10 September 1898. Allan C. Brooks.  
 = *Mustela longicauda oribasus* (Bangs).

## PUTORIUS (LUTREOLA) LUTENSIS Bangs

Proc. Boston Soc. Nat. Hist., **28**, p. 229, fig., March 1898.

*Holotype*.—Male, skin and skull, 7,225 (E. A. and O. Bangs Coll.). Florida, salt marsh opposite Matanzas Inlet. 16 February 1897. Outram Bangs.

= *Mustela rison lutensis* (Bangs).

## PUTORIUS (ARCTOGALE) MURICUS Bangs

Proc. New England Zoöl. Club, **1**, p. 71, 31 July 1899.

*Holotype*.—Male, skin and skull, 9,146 (E. A. and O. Bangs Coll.). California, Eldorado County, Echo, 7,500 feet. 15 July 1897. W. W. Price and E. M. Nutting.

= *Mustela murica* (Bangs).

## PUTORIUS NOVEBORACENSIS NOTIUS Bangs

Proc. New England Zoöl. Club, **1**, p. 53, 9 June 1899.

*Holotype*.—Male, skin and skull, 2,678 (E. A. and O. Bangs Coll.). North Carolina, Buncombe County, Weaverville. 10 July 1892. J. S. Cairns.

= *Mustela noveboracensis notia* (Bangs).

## PUTORIUS OCCISOR Bangs

Proc. New England Zoöl. Club, **1**, p. 54, 9 June 1899.

*Holotype*.—Male, skin and skull, 9,102 (E. A. and O. Bangs Coll.). Maine, Bucksport. 15 January 1899. Alvah G. Dorr.

= *Mustela noveboracensis occisor* (Bangs).

## PUTORIUS RIXOSUS Bangs

Proc. Biol. Soc. Washington, **10**, p. 21, pl. 1, fig. 6; pl. 2, fig. 6; pl. 3, fig. 4, 25 February 1896.

*Holotype*.—Female, skin and skull, 642 (E. A. and O. Bangs Coll.). Saskatchewan, Osler. 15 July 1893. W. C. Colt.

= *Mustela rixosa rixosa* (Bangs).

## PUTORIUS VISON ENERGUMENOS Bangs

Proc. Boston Soc. Nat. Hist., **27**, p. 5, pl. 2, fig. 3, March 1896.

*Holotype*.—Male, skin and skull, 3,555 (E. A. and O. Bangs Coll.). British Columbia, Sumas. 23 September 1895. Allan C. Brooks.

= *Mustela rison energumenos* (Bangs).

## PUTORIUS (LUTREOLA) VULGIVAGUS Bangs

Proc. Boston Soc. Nat. Hist., **26**, p. 539, 31 July 1895.

*Holotype*.—Male, skin and skull, 2,751 (E. A. and O. Bangs Coll.). Louisiana, Burbridge. 10 January 1895. F. L. Small.

= *Mustela vison vulgivaga* (Bangs).

## PUTORIUS XANTHOPENYS MUNDUS Bangs

Proc. New England Zoöl. Club, **1**, p. 56, 9 June 1899.

*Holotype*.—Male, skin and skull, 5,459 (E. A. and O. Bangs Coll.). California, Marin County, Point Reyes. 19 June 1896. Charles A. Allen.

= *Mustela xanthogenys munda* (Bangs).

## SPILOGALE AMBARVALIS Bangs

Proc. Boston Soc. Nat. Hist., **28**, p. 222, March 1898.

*Holotype*.—Male, skin and skull, 3,481 (E. A. and O. Bangs Coll.). Florida, Brevard County, Oak Lodge, east peninsula opposite Micco. 30 January 1895. Outram Bangs.

## CANIDAE

## † AMPHICYON ESERI Plieninger

Jahreshefte d. Ver. f. vaterländ. Naturk. in Würtemberg, Stuttgart, **5**, pt. 2, p. 216, pl. 1, fig. 9, 1849.

*Holotype*.—Upper right carnassial, M. C. Z. 9,190. Germany, Würtemburg, Ober Kirchberg an der Iller (Miocene). About 1849. Eser Collection.

**NOTE.**—This is the specimen listed by Cushman (Proc. Boston Soc. Nat. Hist., **33**, p. 272, 1907) as in the palaeontological collection of the Boston Society of Natural History; it has since been transferred to the Museum of Comparative Zoölogy.

## †CANIS MISSISSIPPIENSIS J. A. Allen

Amer. Journ. Sci., ser. 3, **11**, p. 48, January 1876.

*Cotypes*.—A right humerus, M. C. Z. 10,988; an imperfect left tibia, M. C. Z. 10,990; the distal two thirds of a right femur, M. C. Z. 10,991. Wisconsin, Blue Mounds (lead crevices, Pleistocene). 1857. J. D. Whitney.

NOTE.—In the original description no exact locality or date is given. These are found in J. D. Whitney, "Report of a Geological Survey of the Upper Mississippi Lead Region," pp. 310, 311, 423, 1862.  
= *Aenocyon dirus* (Leidy).

CERDOCYON THOUS GERMANUS G. M. Allen

Proc. Biol. Soc. Washington, **36**, p. 55, 28 March 1923.

*Holotype*.—Skin and skull, M. C. Z. 19,850. Colombia, high savanna of Bogotá, 9,000 feet. Nicéforo Maria.

† PACHYCYON ROBUSTUS J. A. Allen

Mem. Mus. Comp. Zoöl., **10**, art. 2, p. 4, pl. 1-3, December 1885.

*Holotype*.—Scapula, humerus, pelvis, femur, tibia, M. C. Z. 7,091. Virginia, Lee County, Ely Cave. ? 1875. N. S. Shaler.

= *Canis familiaris* Linné, 1758 (an aboriginal Indian dog).

UROCYON AQUILUS Bangs

Proc. Biol. Soc. Washington, **12**, p. 93, 30 April 1898.

*Holotype*.—Male, skin and skull, 8,001 (E. A. and O. Bangs Coll.). Colombia, Santa Marta Mountains, between 2,000 and 3,000 feet. 10 February 1898. W. W. Brown, Jr.

= *Cerdocyon thous aquilus* (Bangs).

UROCYON CINEREOARGENTEUS FURVUS G. M. Allen and T. Barbour

Bull. Mus. Comp. Zoöl., **65**, p. 266, 26 February 1923.

*Holotype*.—?Female, skin and skull, M. C. Z. 19,774. Panama Canal Zone, three miles west of Balboa. Dr. Herbert Clark.

UROCYON CINEREOARGENTEUS OCYTHOUS Bangs

Proc. New England Zoöl. Club, **1**, p. 43, 5 June 1899.

*Holotype*.—Female, skin and skull, 4,290 (E. A. and O. Bangs Coll.). Wisconsin, Grant County, Platteville. 25 January 1896. N. E. France.

VULPES DELETRIX Bangs

Proc. Biol. Soc. Washington, **12**, p. 36, 24 March 1898.

*Holotype*.—Female, skin and skull, 6,967 (E. A. and O. Bangs Coll.). Newfoundland, Bay St. George. 24 April 1897. Ernest Doane.

**VULPES PENNSYLVANICA RUBRICOSA** Bangs

Science, new ser., **7**, p. 272, 25 February 1898.

*Holotype*.—Female, skin and skull, 116 (E. A. and O. Bangs Coll.). Nova Scotia, Digby. 3 November 1893. Outram Bangs.

New name for *Vulpes pennsylvanica vafra* Bangs (Proc. Biol. Soc. Washington, **11**, p. 53, 16 March 1897), not *Vulpes vafra* Leidy, 1869.

= *Vulpes fulva rubricosa* Bangs.

**VULPES FULVUS RUBRICATUS** Miller

Bull. N. Y. State Mus., **8**, no. 38, p. 128, 1900.

“Accidental renaming” of *V. pennsylvanica rubricosa* Bangs (*q. v.*).

= *Vulpes fulva rubricosa* Bangs.

**VULPES RUBRICOSA BANGSI** Merriam

Proc. Washington Acad. Sci., **2**, p. 667, 28 December 1900.

*Holotype*.—Female, skin and skull, 8,880 (E. A. and O. Bangs Coll.). Labrador peninsula, Lance au Loup, Strait of Belle Isle. 2 October 1899. Ernest Doane.

= *Vulpes fulva bangsi* Merriam.

**FELIDAE****FELIS BANGSI** Merriam

Proc. Washington Acad. Sci., **3**, p. 595, 11 December 1901.

*Holotype*.—Male, skin and skull, 8,413 (E. A. and O. Bangs Coll.). Colombia, Dibulla. 8 October 1899. W. W. Brown, Jr.

= *Felis concolor bangsi* Merriam.

**FELIS BANGSI COSTARICENSIS** Merriam

Proc. Washington Acad. Sci., **3**, p. 596, 11 December 1901.

*Holotype*.—Female, skin and skull, M. C. Z. 10,118. Panama, Chiriquí, Boquete. 22 April 1901. W. W. Brown, Jr.

= *Felis concolor costaricensis* Merriam.

**FELIS CAPENSIS PHILLIPSI** G. M. Allen

Bull. Mus. Comp. Zoöl., **58**, p. 337, July 1914.

*Holotype*.—Male, skin and skeleton, M. C. Z. 14,908. Sudan, Blue Nile, El Garef. 10 January 1913. John C. Phillips and G. M. Allen.

## FELIS CORYI Bangs

Proc. Biol. Soc. Washington, **13**, p. 15, 31 January 1899.

*Holotype*.—Male, skin and skull, 7,742 (E. A. and O. Bangs Coll.). Florida, wilderness back of Sebastian. 1 January 1898. F. R. Hunter.  
= *Felis concolor coryi* Bangs.

## FELIS IMPROCERA Phillips

Proc. Biol. Soc. Washington, **25**, p. 85, pl. 5, 4 May 1912.

*Holotype*.—Male, skin and skull, M. C. Z. 12,704. Mexico, Lower California, Calmalli. September 1911. E. W. Funcke.  
= *Felis concolor improcera* Phillips.

## † ? FELIS MAXIMA Scott

Bull. Mus. Comp. Zoöl., **20**, p. 70, fig. 4, November 1890.

*Holotype*.—Humerus, M. C. Z. 9,050 (the distal epicondylus, originally a part of the specimen, has been broken off and lost). Kansas, Loup Fork (?Pliocene). C. H. Sternberg.

## LYNX (CERVARIA) FASCIATUS OCULEUS Bangs

Proc. New England Zoöl. Club, **1**, p. 23, 31 March 1899.

*Holotype*.—Male, skin and skull, 8,633 (E. A. and O. Bangs Coll.). California, Marin County, Nicasio. 11 December 1898. Charles A. Allen.

## LYNX GIGAS Bangs

Proc. Biol. Soc. Washington, **11**, p. 50, pl. 2, fig. 1, 16 March 1897.

*Holotype*.—Male, skin and skull, 4,951 (E. A. and O. Bangs Coll.). Nova Scotia, fifteen miles back of Bear River. 11 December 1895.

## LYNX SUBSOLANUS Bangs

Proc. Biol. Soc. Washington, **11**, p. 49, pl. 2, fig. 2, 16 March 1897.

*Holotype*.—Male, skin and skull, 1,190 (E. A. and O. Bangs Coll.). Newfoundland, Codroy. 13 June 1894. Ernest Doane.

## PRIMATES

## CEBIDAE

## CEBUS CURTUS Bangs

Bull. Mus. Comp. Zoöl., **46**, p. 91, 1905.

*Holotype*.—Male, skin and skull, M. C. Z. 10,824. Colombia, Gorgona Island. 2 July 1904. W. W. Brown, Jr.

## PONGIDAE

## TROGLODYTES GORILLA Savage and Wyman

Proc. Boston Soc. Nat. Hist., **2**, p. 245, August 1847; Boston Journ. Nat. Hist., **5**, p. 417, pl. 40–43, December 1847.

The specimens on which this species was based were: four skulls, two of them male, two female, "one of each in a perfect condition, and all of them adult"; a male and a female pelvis; "the long bones of the upper and lower extremities"; a "few vertebrae and ribs," of which two cervicals, the twelfth dorsal and two lumbar vertebrae of a male are alone specifically mentioned (wrongly referred to a female in table). Of these cotypes the following have been transferred to the museum by the Boston Society of Natural History:

M. C. Z. 9,587, skull, male, figured in plates 40, 42 (lacks three incisors and right canine).

M. C. Z. 9,311, skull, female, figured in plates 41, 43.

M. C. Z. 9,488, pelvis with sacrum of same male.

M. C. Z. 9,489, pelvis with sacrum of same female.

M. C. Z. 10,686, atlas and two dorsal vertebrae of above female.

M. C. Z. 10,687, twelve ribs.

M. C. Z. 10,688, two cervical, three dorsal, and two lumbar vertebrae of above male.

M. C. Z. 10,690, both scapulae, humeri, one ulna, the radii, femora and one tibia of same male.

West Africa, Gaboon, Empongwe, near mouth of the Gaboon River. 1847. Thomas S. Savage, M.D.

= *Gorilla gorilla gorilla* (Savage and Wyman).

## RODENTIA

## GRAPHIURIDAE

## GRAPHIURUS MICROTIS GRISEUS G. M. Allen

Bull. Mus. Comp. Zoöl., **54**, p. 440, April 1912.

*Holotype*.—Male, skin and skull, M. C. Z. 8,244. Kenya Colony, northern Guaso Nyiro. 25 July 1909. G. M. Allen.

= *Claviglis murinus griseus* (G. M. Allen).

## GRAPHIURUS SCHWABI G. M. Allen

Bull. Mus. Comp. Zoöl., **54**, p. 441, April 1912.

*Holotype*.—Skin and skull, M. C. Z. 8,607. Cameroons, Kribi. 1911. Rev. George Schwab.

= *Claviglis schwabi* (G. M. Allen).

## SCIURIDAE

## ARCTOMYS FLAVIVENTER AVARUS Bangs

Proc. New England Zoöl. Club, **1**, p. 68, 31 July 1899.

*Holotype*.—Female, skin and skull, 7,299 (E. A. and O. Bangs Coll.). British Columbia, Okanagan. 17 July 1897. Allan C. Brooks.

= *Marmota flaviventris avara* (Bangs).

## ARCTOMYS IGNAVUS Bangs

Proc. New England Zoöl. Club, **1**, p. 13, 28 February 1899.

*Holotype*.—Male, skin and skull, 7,971 (E. A. and O. Bangs Coll.). Labrador peninsula, Black Bay. 13 July 1898. Ernest Doane.

= *Marmota monax ignava* (Bangs).

## CITELLUS OBSCURUS SICCUS G. M. Allen

Amer. Mus. Novitates, no. 163, p. 3, 2 April 1925.

*Holotype*.—Adult female, skin and skull, M. C. Z. 19,924. China, Shansi, ten miles west of Taiyuanfu. August 1921. Frederic R. Wulsin.

## DREMOMYS PERNYI FLAVIOR G. M. Allen

Proc. Biol. Soc. Washington, **25**, p. 178, 24 December 1912.

*Holotype*.—Male, skin and skull, M. C. Z. 13,691. Southeastern Yunnan, Mongtze. 1911. Bought of Kobayashi.

**DREMOMYS SENEX** G. M. Allen

Mem. Mus. Comp. Zoöl., **40**, p. 229, August 1912.

*Holotype*.—Female, skin and skull, M. C. Z. 7,582. China, Hupeh, Ichanghsien, Nantow. 5 February 1909. Walter R. Zappey.

**SCIUROTAMIAS DAVIDIANUS THAYERI** G. M. Allen

Mem. Mus. Comp. Zoöl., **40**, p. 231, August 1912.

*Holotype*.—Male, skin, M. C. Z. 8,008. China, central Szechwan, Washan, 6,000 feet. 17 May 1908. Walter R. Zappey.

**SCIURUS (GUERLINGUETUS) AESTUANS CHIRIQUENSIS** BANGS

Bull. Mus. Comp. Zoöl., **39**, p. 22, April 1902.

*Holotype*.—Male, skin and skull, M. C. Z. 10,044. Panama, Chiriquí, Divalá. 18 November 1900. W. W. Brown, Jr.

= *Sciurus hoffmanni chiriquensis* Bangs.

**SCIURUS (MICROSCIURUS) BROWNII** Bangs

Bull. Mus. Comp. Zoöl., **39**, p. 24, April 1902.

*Holotype*.—Male, skin and skull, M. C. Z. 10,404. Panama, Chiriquí Province, Bogaba. 15 July 1901. W. W. Brown, Jr.

= *Microsciurus alfare browni* (Bangs).

**SCIURUS CAROLINENSIS EXTIMUS** Bangs

Proc. Biol. Soc. Washington, **10**, p. 158, pl. 9, fig. 4, 28 December 1896.

*Holotype*.—Female, skin and skull, 4,519 (E. A. and O. Bangs Coll.). Florida, Dade County, Miami. 12 March 1895. L. Brownell.

**SCIURUS CAROLINENSIS var. YUCATANENSIS** J. A. Allen

Monographs N. Amer. Rodentia, p. 705, August 1877.

*Cotype*.—Female, skin, M. C. Z. 5,398 (formerly U. S. N. M. 8,502). Yucatan, Merida. March 1865. Dr. A. Schott. Gift of Smithsonian Institution, 1874.

= *Sciurus yucatanensis yucatancensis* J. A. Allen.

## SCIURUS CASTANEOVENTRIS HAEMOBAPHES G. M. Allen

Proc. Biol. Soc. Washington, **25**, p. 177, 24 December 1912.

*Holotype*.—Male, skin and skull, M. C. Z. 13,693. Southeastern Yunnan, Chihping. 26 February 1911. Kobayashi.

= *Callosciurus erythraeus haemobaphes* (G. M. Allen).

## SCIURUS CASTANOTUS Baird

Proc. Acad. Nat. Sci. Philadelphia, p. 332, 1855.

*Cotype*.—Skin, M. C. Z. 4,692 (formerly U. S. N. M. 122/1,108). New Mexico, Grant County, copper mines (near present Georgetown). Winter, 1851. J. H. Clark. Gift of Smithsonian Institution, 1874.

*NOTE*.—No type is designated in the original description, but in the Mammals of N. America it is seen that there were two specimens, of which U. S. N. M. 121/1,107 is the other cotype. Because of the correspondence of the skull measurements of this latter, with those published in the original description, Lyon and Osgood regard it as the type, though strictly both are cotypes.

= *Sciurus aberti* Woodhouse.

## SCIURUS HUDSONICUS GYMNICUS Bangs

Proc. New England Zoöl. Club, **1**, p. 28, 31 March 1899.

*Holotype*.—Female, skin and skull, 4,914 (E. A. and O. Bangs Coll.). Maine, Greenville (near Moosehead Lake). 1 December 1895. C. H. Goldthwaite.

## SCIURUS HUDSONICUS LOQUAX Bangs

Proc. Biol. Soc. Washington, **10**, p. 161, pl. 10, fig. 1, 28 December 1896.

*Holotype*.—Male, skin and skull, 4,270 (E. A. and O. Bangs Coll.). Connecticut, Liberty Hill. 24 December 1895. Outram Bangs.

## SCIURUS HUDSONICUS ORARIUS Bangs

Proc. Biol. Soc. Washington, **11**, p. 281, 30 December 1897.

*Holotype*.—Female, skin and skull, 4,978 (E. A. and O. Bangs Coll.). California, Mendocino County, Philo. 9 December 1895. Charles A. Allen.

= *Sciurus douglasii mollipilosus* Audubon and Bachman.

**SCIURUS LUDOVICIANUS VICINUS Bangs**

Proc. Biol. Soc. Washington, **10**, p. 150, pl. 8, fig. 3, 28 December 1896.

*Holotype*.—Female, skin and skull, 5,215 (E. A. and O. Bangs Coll.). West Virginia, White Sulphur Springs. 29 January 1896. Thaddeus Surber.

= *Sciurus niger neglectus* Gray.

**SCIURUS NESAEUS G. M. Allen**

Proc. Biol. Soc. Washington, **15**, p. 93, 25 April 1902.

*Holotype*.—Female, skin with incisors, M. C. Z. 10,744. Venezuela, Margarita Island, El Valle. 8 July 1901. Austin H. Clark.

**SCIURUS VARIABILIS MORULUS Bangs**

Proc. New England Zoöl. Club, **2**, p. 43, 20 September 1900.

*Holotype*.—Female, skin and skull, 8,420 (E. A. and O. Bangs Coll.). Panama, Loma del Leon. 13 March 1900. W. W. Brown, Jr.

= *Sciurus gerrardi morulus* Bangs.

**SCIURUS VARIABILIS SALTUENSIS Bangs**

Proc. Biol. Soc. Washington, **12**, p. 185, 16 November 1898.

*Holotype*.—Female, skin and skull, 8,144 (E. A. and O. Bangs Coll.). Colombia, Santa Marta, Pueblo Viejo, 8,000 feet. 26 March 1898. W. W. Brown, Jr.

= *Sciurus saltuensis* Bangs.

**SPERMOPHILUS ARMATUS Kennicott**

Proc. Acad. Nat. Sci. Philadelphia, p. 158, 1863.

Wyoming, Fort Bridger (formerly part of Utah). April and May, 1858. C. Drexler. Gift of Smithsonian Institution, 1874.

The following cotypes are catalogued in the collection:

M. C. Z. 297, skull (formerly U. S. N. M. 4,799), but the skin accompanying it, U. S. N. M. 3,472, is not to be found.

M. C. Z. 4,790, skin (formerly U. S. N. M. 3,370); no record of skull.

M. C. Z. 4,791, skin (formerly U. S. N. M. 3368/4796), spoiled in making over and discarded.

M. C. Z. 4,793, skin and skull (formerly U. S. N. M. 3,378); skin made over and skull removed.

M. C. Z. 4,794, skull (formerly U. S. N. M. 3,374); skin spoiled in making over, and discarded.

NOTE.—No numbers are mentioned in the original description, hence "all the specimens from Fort Bridger collected by C. Drexler and in the collection prior to 1863 are evidently cotypes of the species. . . . The labels all have *armatus* written on them, possibly in Kennicott's own hand" (Lyon and Osgood, Bull. U. S. Nat. Mus., no. 62, p. 163, 1909). The United States National Museum catalogue numbers for the last four skins listed above, as given by these authors, are 3,470, 3,468, 3,478, 3,474, but on the original labels as identified by the collector's number, the same skins are numbered 3,370, 3,368, 3,378, 3,374 respectively.

= *Citellus armatus* (Kennicott).

#### SPERMOPHILUS OBSOLETUS Kennicott

Proc. Acad. Nat. Sci. Philadelphia, p. 157, 1863.

Two of the cotypes are in the collection, viz.:

M. C. Z. 4817, skin. South Dakota (formerly Nebraska), Black Hills. Dr. F. V. Hayden. Gift of Smithsonian Institution, 1874. On the back of the original label are the words, "*Spermophilus obsoletus* type." This was formerly U. S. N. M. 3252/4795, but the skull is now lost.

M. C. Z. 4,819, skin. Nebraska, 220 miles west of Fort Kearney. 16 August 1857. Dr. J. G. Cooper. Gift of Smithsonian Institution, 1874. Formerly U. S. N. M. 3,223.

For a complete list of the cotypes, see Lyon and Osgood, Bull. U. S. Nat. Mus., no. 62, p. 168–169, 1909.

= *Citellus obsoletus* (Kennicott).

#### SPERMOPHILUS PARRYI KODIACENSIS J. A. Allen

Proc. Boston Soc. Nat. Hist., 16, p. 292, 1874.

*Cotypes*.—Skin and skull, M. C. Z. 4,782, 4,783 (formerly U. S. N. M. 9,367, 9,360). Alaska, Kodiak Island. September 1868. F. Bischoff. Gift of Smithsonian Institution, 1874.

NOTE.—No type is designated in the original description but in the article on Sciuridae in Coues and Allen's Monographs of N. American Rodentia, p. 848, 1877 (of which the 1874 paper is a résumé), the specimens on which the name is based are listed as U. S. N. M. 9,358–9,362, 9,366–9,368, 9,242, all of which are, therefore, cotypes, though Lyon and Osgood make no mention of them in their list.

= *Citellus parryi kodiacensis* (J. A. Allen).

## SPERMOPHILUS TRIDECIMLINEATUS var. PALLIDUS J. A. Allen

Proc. Boston Soc. Nat. Hist., 16, p. 291, 1874.

No type was specified in the original description, but in his article on the Sciuridae in Coues and Allen's Monographs of N. American Rodentia, 1877, of which the paper of 1874 was a digest, Dr. Allen lists (on pp. 876, 877, 880, 881) sixty skins, four skulls, and nine alcoholics, which are all equally the cotypes upon which the species is based. Later, the same author (Bull. Amer. Mus. Nat. Hist., 7, p. 338, 1895) restricted *pallidus* "to the arid region of the plains, from Upper Missouri southward to eastern Colorado . . . type region the plains of the Lower Yellowstone River."

Of the cotypes listed in 1877, the following are entered in the museum catalogue:

M. C. Z. 1,596, skin (formerly 3061/3310 U. S. N. M.). Wyoming, west of Laramie. 6 July 1857. W. S. Wood. Gift of Smithsonian Institution, 1868. Skull probably in United States National Museum.

M. C. Z. 2,655, skin. Wyoming, Cheyenne. 19 August 1871. J. A. Allen and C. W. Bennett. Rocky Mountain Expedition.

M. C. Z. 2,656, skin and teeth. Wyoming, Cheyenne. 19 August 1871. J. A. Allen and C. W. Bennett. Rocky Mountain Expedition.

M. C. Z. 2,657, skin. Colorado, Park County. 14 July 1871. J. A. Allen and C. W. Bennett. Rocky Mountain Expedition.

M. C. Z. 2,658, skin. Colorado, Fairplay. 15 July 1871. J. A. Allen and C. W. Bennett. Rocky Mountain Expedition.

M. C. Z. 2,659, skin (lost). Colorado, Park County, Hartsel's. 26 July 1871. J. A. Allen and C. W. Bennett. Rocky Mountain Expedition.

M. C. Z. 2,660, skin (discarded). Colorado, Park County, Hartsel's. 28 July 1871. J. A. Allen and C. W. Bennett. Rocky Mountain Expedition.

M. C. Z. 2,661, skin. Colorado, Park County, Hartsel's. 28 July 1871. J. A. Allen and C. W. Bennett. Rocky Mountain Expedition.

M. C. Z. 2,662, skin. Colorado, Park County, Hartsel's. 28 July 1871. J. A. Allen and C. W. Bennett. Rocky Mountain Expedition.

M. C. Z. 2,663. Wyoming, Cheyenne. 25 August 1871. J. A. Allen and C. W. Bennett. Rocky Mountain Expedition.

M. C. Z. 4,829, skin (formerly U. S. N. M. 9,644). Wyoming, Camp Carling. 26 July 1870. W. T. Schmidt. Gift of Smithsonian Institution, 1876.

M. C. Z. 4,830, skin (destroyed) and skull (formerly U. S. N. M. 3,220). Wyoming, Forks of Platte River. 9 August 1851. J. G. Cooper. Gift of Smithsonian Institution, 1874.

M. C. Z. 4,831, skin (formerly U. S. N. M. 3,038), now lost. Wyoming, Platte River. 2 July 1857. Dr. W. A. Hammond. Gift of Smithsonian Institution, 1874.

The remaining specimens listed by Dr. Allen are presumably in the United States National Museum, but Lyon and Osgood omit the subspecies from their list.

= *Citellus tridecimlineatus pallidus* (J. A. Allen).

#### SPERMOPHILUS (ICTIDOMYS) TRIDECLINEATUS BADIUS Bangs

Proc. New England Zoöl. Club, 1, p. 1, 8 February 1899.

*Holotype*.—Male, skin and skull, 1,682 (E. A. and O. Bangs Coll.). Missouri, Stotesbury. 17 April 1894. Thaddeus Surber.

= *Citellus tridecimlineatus badius* (Bangs).

#### SYNTHEOSCIURUS BROCHUS Bangs

Bull. Mus. Comp. Zoöl., 39, p. 25, figs. 1-4, April 1902.

*Holotype*.—Male, skin and skull, M. C. Z. 10,402. Panama, Chiriquí, Boquete, 7,000 feet. 30 April 1901. W. W. Brown, Jr.

#### TAMIAS COOPERI Baird

Proc. Acad. Nat. Sci. Philadelphia, p. 334, 1855; see also Mammals of N. America, p. 301, 1857, for list of specimens.

One of the two cotypes, skin, M. C. Z. 4,754 (formerly U. S. N. M. 211/1,182). Washington, Klickitat Pass, Cascade Mountains. July 1853. Dr. J. G. Cooper. Gift of Smithsonian Institution, 1874.

NOTE.—The skin has been made over, but the skull cannot be found. The other cotype is U. S. N. M. 212/1,183.

= *Eutamias townsendi cooperi* (Baird).

#### TAMIAS DORSALIS Baird

Proc. Acad. Nat. Sci. Philadelphia, p. 332, 1855; see also Mammals of N. America, p. 300, 1857, where types are designated.

One of the two cotypes, a made-over skin, M. C. Z. 4,759 (formerly U. S. N. M. 119/3,151). New Mexico, Grant County, copper mines of Mimbres River (near present Georgetown). 1851. J. H. Clark. Gift of Smithsonian Institution, 1874.

NOTE.—The mandible of this specimen is still in the United States National Museum, as is also the other cotype, a mounted skin, no. 120, with the same data.

= *Eutamias dorsalis dorsalis* (Baird).

TAMIAS QUADRIVITTATUS NEGLECTUS J. A. Allen

Bull. Amer. Mus. Nat. Hist., **3**, p. 106, June 1890.

*Holotype*.—Skin and skull, M. C. Z. 1,575. Ontario, eastern end of Lake Superior, near mouth of Montreal River. 5 July 1868. Louis Agassiz.

= *Eutamias minimus borealis* (J. A. Allen) in part, see A. H. Howell, N. American Fauna, no. 52, p. 56, 1929.

TAMIAS QUADRIVITTATUS B. var. PALLIDUS J. A. Allen

Proc. Boston Soc. Nat. Hist., **16**, p. 289, 1874.

No type was specified in the original paper, but in the Monographs of N. American Rodentia, 1877, a list of the fifty-three specimens examined, and on which the name is based, is given on pages 807, 808. These are, therefore, all cotypes, but since several distinct forms were included among them, Cary (Proc. Biol. Soc. Washington, **19**, p. 88, 1906) has proposed to regard Camp Thorne, Yellowstone River, Montana, as the type locality. Of the three specimens listed from there, one is still in the United States National Museum (no. 11,656) and is regarded as a lectotype by Lyon and Osgood; the second is M. C. Z. 4,743; and the third is lost sight of.

Of the original series of cotypes, the following are in the Museum of Comparative Zoölogy, through gift of the Smithsonian Institution in 1874:

M. C. Z. 4,738, skin and rostrum (formerly U. S. N. M. 3,240). Montana, Yellowstone River, below Powder River. Dr. F. V. Hayden.

M. C. Z. 4,739, skin and skull (formerly U. S. N. M. 9,664). Wyoming, North Platte. 24 August 1870. H. D. Schmidt.

M. C. Z. 4,740, skin (formerly U. S. N. M. 9,689). Wyoming, Bitter Creek. 16 October 1874. H. D. Schmidt.

M. C. Z. 4,742, skin (formerly U. S. N. M. 9,671). Wyoming, Green River. 11 September 1870. H. D. Schmidt.

M. C. Z. 4,743, skin and parts of skull (formerly U. S. N. M. 11,657). Montana, Camp Thorne, near present town of Glendive. 18 July 1873. J. A. Allen.

M. C. Z. 4,744, skin (formerly U. S. N. M. 9,682). Wyoming, Henry's Fork of Green River. 6 October 1874. H. D. Schmidt.  
 = *Eutamias minimus pallidus* (J. A. Allen).

### TAMIAS STRIATUS VENUSTUS Bangs

Proc. Biol. Soc. Washington, **10**, p. 137, 28 December 1896.

*Holotype*.—Male, skin and skull, 5,478 (E. A. and O. Bangs Coll.). Oklahoma, Adair County, Stilwell. 13 August 1896. Thaddeus Surber.

### PETAURISTIDAE

#### SCIUROPTERUS ALPINUS BANGSI Rhoads

Proc. Acad. Nat. Sci. Philadelphia, p. 321, footnote, June 1897.

*Holotype*.—Male, skin and skull, 6,959 (E. A. and O. Bangs Coll.). Idaho, Idaho County. 8 March 1897. Harbison and Bargamin.  
 = *Glaucomys sabrinus bangsi* (Rhoads).

#### SCIUROPTERUS ALPINUS LASCIVUS Bangs

Proc. New England Zoöl. Club, **1**, p. 69, 31 July 1899.

*Holotype*.—Female, skin and skull, 9,186 (E. A. and O. Bangs Coll.). California, Eldorado County, Tallac. 28 August 1898. W. W. Price and P. O. Simons.  
 = *Glaucomys sabrinus lascivus* Bangs.

#### SCIUROPTERUS SABRINUS MAKKOVIKENSIS Sornborger

Ottawa Naturalist, **14**, p. 48, June 1900.

*Cotypes*.—Skins and skulls, M. C. Z. 10,476, 10,477, 10,478. Labrador peninsula, Makkovik. 1899. Rev. W. W. Perrett.  
 = *Glaucomys sabrinus makkovicensis* (Sornborger).

#### SCIUROPTERUS SILUS Bangs

Proc. Biol. Soc. Washington, **10**, p. 163, text-fig. 29, pl. 10, fig. 6, 28 December 1896.

*Holotype*.—Male, skin and skull, 4,931 (E. A. and O. Bangs Coll.). West Virginia, White Sulphur Springs, top of Katis Mountain. 2 September 1895. Thaddeus Surber.

= *Glaucomys volans volans* (Linné).

**SCIUROPTERUS VOLANS QUERCETI Bangs**

Proc. Biol. Soc. Washington, **10**, p. 166, text-fig. 32, pl. 10, fig. 4, 28 December 1896.

*Holotype*.—Female, skin and skull, 2,451 (E. A. and O. Bangs Coll.). Florida, Citrus County, Citronelle. 17 September 1894. F. L. Small.  
= *Glaucomys volans querleti* (Bangs).

**GEOMYIDAE****GEOMYS COLONUS Bangs**

Proc. Boston Soc. Nat. Hist., **28**, p. 178, figs., March 1898.

*Holotype*.—Male, skin and skull, 5,001 (E. A. and O. Bangs Coll.). Georgia, St. Mary's. 21 March 1896. Outram Bangs.

**GEOMYS CUMBERLANDIUS Bangs**

Proc. Boston Soc. Nat. Hist., **28**, p. 180, fig., March 1898.

*Holotype*.—Male, skin and skull, 5,015 (E. A. and O. Bangs Coll.). Georgia, Cumberland Island, "Stafford Place." 17 April 1896. Outram Bangs.

**GEOMYS FLORIDANUS AUSTRINUS Bangs**

Proc. Boston Soc. Nat. Hist., **28**, p. 177, March 1898.

*Holotype*.—Male, skin and skull, 6,983 (E. A. and O. Bangs Coll.). Florida, Hillsboro County, Belleair. 3 August 1897. W. S. Dickinson.

**MACROGEOMYS CAVATOR Bangs**

Bull. Mus. Comp. Zoöl., **39**, p. 42, figs. 24, 25, April 1902.

*Holotype*.—Male, skin and skull, M. C. Z. 10,381. Panama, Chiriquí, Boquete, 4,800 feet. 9 March 1901. W. W. Brown, Jr.

**MACROGEOMYS PANSA Bangs**

Bull. Mus. Comp. Zoöl., **39**, p. 44, April 1902.

*Holotype*.—Female, skin and skull, M. C. Z. 10,364. Panama, Chiriquí, Bogaba. 6 July 1901. W. W. Brown, Jr.

## HETEROMYIDAE

## DIPODOMYS CALIFORNICUS PALLIDULUS Bangs

Proc. New England Zoöl. Club, **1**, p. 65, 31 July 1899.

*Holotype*.—Female, skin and skull, 9,147 (E. A. and O. Bangs Coll.). California, Colusa County, Sites. 27 June 1896. P. O. Simons.  
 = *Dipodomys heermanni californicus* Merriam.

## DIPODOPS ORDII PALMERI J. A. Allen

Bull. Amer. Mus. Nat. Hist., **3**, p. 276, 30 June 1891.

*Cotypes*.—Skins and skulls, M. C. Z. 5,886, 5,887. Mexico, San Luis Potosi. 1 May and 10 March 1878. Edward Palmer, M.D.  
 = *Dipodomys ordii palmeri* (J. A. Allen).

## HETEROMYS REPENS Bangs

Bull. Mus. Comp. Zoöl., **39**, p. 45, fig. 27, April 1902.

*Holotype*.—Female, skin and skull, M. C. Z. 10,356. Panama, Chiriquí, Boquete, 4,000 feet. 8 April 1901. W. W. Brown, Jr.

## HETEROMYS IRRORATUS ALLENI Coues

In J. A. Allen, Bull. Mus. Comp. Zoöl., **8**, p. 187, March 1881.

*Holotype*.—Skin and skull, M. C. Z. 5,889. Mexico, San Luis Potosi, Rio Verde, Hacienda Angostura. 26 February 1878. Edward Palmer, M.D.

= *Liomys irroratus allenii* (Coues).

## PEROGNATHUS LONGIMEMBRIS BANGSI Mearns

Bull. Amer. Mus. Nat. Hist., **10**, p. 300, 31 August 1898.

*Holotype*.—Female, skin and skull, 5,304 (E. A. and O. Bangs Coll.). California, Riverside County, Colorado Desert, Palm Springs. 13 April 1896. E. C. Thurber.

## CASTORIDAE

## CASTOR CAECATOR Bangs

Bull. Mus. Comp. Zoöl., **54**, p. 513, fig., July 1913.

*Holotype*.—Male, skull, 6,979 (E. A. and O. Bangs Coll.). Newfoundland, near Bay St. George. 1896. Ernest Doane.

† *CHALICOMYS ESERI* H. von Meyer

Jahreshefte d. Ver. f. vaterländ. Naturk. in Württemberg, Stuttgart, **2**, p. 147, pl. 3, fig. 1, a, b, 1846.

Germany, Ulm, freshwater limestone of the Oerlinger Valley. Eser Collection.

A fragment of the lower jaw, with four molariform teeth in place was the holotype. A specimen in the Eser Collection, now M. C. Z. 9,327, marked "Bestimt u. gezeichnet von Herm. v. Meyer," is probably the same. It agrees very well with the fragment figured, except that the last molar is missing and the specimen itself seems to have had the matrix (in which it was figured) quite removed from the lower part of the jaw. The reference usually cited for the original description — Jahrb. f. Mineral. 1846, p. 474 — merely gives the name without diagnosis.

## CRICETIDAE

*AKODON TEGUINA APRICUS* Bangs

Bull. Mus. Comp. Zoöl., **39**, p. 40, figs. 20, 21, April 1902.

*Holotype*.—Female, skin and skull, M. C. Z. 10,236. Panama, Chiriquí, Boquete, 4,000 feet. 24 February 1901. W. W. Brown, Jr.

= *Scotinomys teguina apricus* (Bangs).

*AKODON XERAMPELINUS* Bangs

Bull. Mus. Comp. Zoöl., **39**, p. 41, figs. 22, 23, April 1902.

*Holotype*.—Male, skin and skull, M. C. Z. 10,240. Panama, Chiriquí, Volcan de Chiriquí, 10,300 feet. 26 May 1901. W. W. Brown, Jr.

= *Scotinomys xerampelinus* (Bangs).

*ARVICOLA BREWERI* Baird

Mammals of N. America, p. 525, 1857.

*Cotype*.—In alcohol, M. C. Z. 4,365 (formerly U. S. N. M. 2,833), an immature specimen lacking more or less of the fur but otherwise in good condition. Massachusetts, Muskeget Island. July 1856. Dr. Thomas M. Brewer. Gift of Smithsonian Institution, April, 1873.

*Note*.—Of the six specimens on which Baird founded this species, four are in the United States National Museum; the above cotype is one of the two which Lyon and Osgood state "cannot now be found."

= *Microtus breweri* (Baird).

## ARVICOLA RIPARIA var. LONGIPILIS Baird

Mammals of N. America, pp. 522, 524, 1857.

*Cotype*.—Skin and skull, M. C. Z. 5,292 (formerly U. S. N. M. 745). Illinois, West Northfield. Spring, 1855. Robert Kennicott. From Smithsonian Institution.

NOTE.—Baird proposed the name "var. *longipilis*" for the "Long-haired Meadowmouse" of Kennicott (Rept. U. S. Commissioner of Patents for 1856, p. 104, pl. 13, 1857) in case it should prove separable from typical *Arricola riparia* (= *Microtus pennsylvanicus*). Baird's specimens were taken by Kennicott at West Northfield, Ill., and by Hoy at Racine, Wisconsin. Although no individuals are mentioned, the above specimen was undoubtedly among those examined by Baird in preparing his diagnosis and, therefore, is a cotype. Its tail is imperfect, but it has been made over into an excellent study specimen.

= *Microtus pennsylvanicus pennsylvanicus* (Ord).

## ARVICOLA TERRAENOVAE Bangs

Proc. Biol. Soc. Washington, 9, p. 129, pl. 2, 27 July 1894.

*Holotype*.—Male, skin and skull, 1,104 (E. A. and O. Bangs Coll.). Newfoundland, Codroy. 27 November 1893. Ernest Doane.

= *Microtus terraenovae* (Bangs).

## CANSUMYS CANUS G. M. Allen

Journ. Mammalogy, 9, p. 245, August 1928.

*Holotype and genotype*.—Adult female, skin and skull, M. C. Z. 23,779. China, southern Kansu, Choni. 9 December 1925. Robert B. Ekwall.

## CRASEOMYS AQUILUS G. M. Allen

Mem. Mus. Comp. Zoöl., 40, p. 216, figs. E, F, August 1912.

*Holotype*.—Male, skin and skull, M. C. Z. 7,190. China, Hupeh, Showlungtan. 17 May 1907. W. R. Zappey.

= *Caryomys aquilus* (G. M. Allen).

## DICROSTONYX CHIONOPAES G. M. Allen

Proc. New England Zoöl. Club, 5, p. 62, 9 April 1914.

*Holotype*.—Male, skin and skull, M. C. Z. 15,263. Northeastern Siberia, Nijni Kolymsk, near mouth of Kolyma River. 15 October 1911. Johan Koren.

## DICROSTONYX EXSUL G. M. Allen

Bull. Mus. Comp. Zoöl., **62**, p. 532, 27 February 1919.

*Holotype*.—Male, skin and skull, M. C. Z. 11,885. St. Lawrence Island, Bering Sea. 24 June 1913. Joseph Dixon.

## EVOTOMYS PROTEUS Bangs

In Bailey, Proc. Biol. Soc. Washington, **11**, p. 137, 13 May 1897.

*Holotype*.—Female, skin and skull, 4,081 (E. A. and O. Bangs Coll.). Labrador, Hamilton Inlet. 27 August 1895. C. H. Goldthwaite.  
= *Clethrionomys gapperi proteus* (Bangs).

## FIBER OBSCURUS Bangs

Proc. Biol. Soc. Washington, **9**, p. 133, 15 September 1894.

*Holotype*.—Female, skin and skull, 1,155 (E. A. and O. Bangs Coll.). Newfoundland, Codroy. 14 May 1894. Ernest Doane.  
= *Ondatra obscura* (Bangs).

## FIBER ZIBETHICUS AQUILONIUS Bangs

Proc. New England Zoöl. Club, **1**, p. 11, 28 February 1899.

*Holotype*.—Male, skin and skull, 3,957 (E. A. and O. Bangs Coll.). Labrador, Hamilton Inlet, Rigoulette. 15 August 1895. C. H. Goldthwaite.  
= *Ondatra zibethica aquilonia* (Bangs).

## FIBER ZIBETHICUS RIVALICIUS Bangs

Proc. Boston Soc. Nat. Hist., **26**, p. 541, 31 July 1895.

*Holotype*.—Male, skin and skull, 2,719 (E. A. and O. Bangs Coll.). Louisiana, Plaquemines Parish, Burbridge. 31 January 1895. F. L. Small.  
= *Ondatra rivalicia* (Bangs).

## HESPEROMYS EREMICUS Baird

Mammals of N. America, p. 479, 1857.

The following cotypes are in the collection:  
M. C. Z. 4,310, in alcohol (formerly U. S. N. M. 2,574). California, Fort Yuma. G. H. Thomas. Gift of Smithsonian Institution, April 1873.

M. C. Z. 5,273, skin and skull (formerly U. S. N. M. 1,336). California, Colorado bottom. A. Schott. Gift of Smithsonian Institution. (The skin has been made over and skull removed.)

NOTE.—Baird's description was based on three specimens from Fort Yuma, Arizona, and three from Colorado bottom, California, no one of which was specially mentioned as a type. Though all are therefore strictly cotypes, Lyon and Osgood have argued that since "much of the description is based upon details of the soles of the feet, which could be made out more readily in alcoholic specimens" and since two of the Fort Yuma specimens were in alcohol, while the others were skins, it seems better to restrict the cotypes to the three from Fort Yuma, a definite locality, and to consider those from Colorado bottom as paratypes.

= *Peromyscus eremicus eremicus* (Baird).

#### HESPEROMYS GOSSYPINUS LeConte

Proc. Acad. Nat. Sci. Philadelphia, 6, p. 411, 1854 (?).

*Holotype or cotype*.—Male, skin and skull, M. C. Z. 5,275, received from Smithsonian Institution, February 1876, where it was originally catalogued as 546. Skin made over and skull removed, 1917. Georgia (type locality presumed to be the Le Conte plantation at Riceboro). 13 September 1847. Major John Le Conte.

NOTE.—Writing of this specimen, Lyon and Osgood (1909) say that it "cannot now be found" in the United States National Museum, but that since U. S. N. M. 4,704, received later from Le Conte, is the only one of his original specimens extant in the United States National Museum, "this is perhaps well to be treated as a cotype." No. 546 (U. S. N. M. = M. C. Z. 5,275), however, "is the only specimen from Georgia listed in Baird's Mammals of North America" and its measurements on the original label agree more nearly with those of the original description than do those of any other of Le Conte's specimens received by the United States National Museum ("[head and] body  $4\frac{1}{2}$ , tail  $2\frac{7}{12}$  in.," against 4.5 and 3 inches respectively in the original description). This specimen, therefore, seems equally entitled to be considered a cotype if not the holotype.

= *Peromyscus gossypinus gossypinus* (Le Conte).

#### HESPEROMYS LEUCOPUS ARCTICUS Mearns.

Bull. Amer. Mus. Nat. Hist., 2, p. 285, February 1890 (not of Coues, 1877)

= *nomen nudum*. Proc. Biol. Soc. Washington, 24, pp. 101, 102, 15 May 1911.

*Holotype*.—Male, skin and skull, M. C. Z. 5,555 (formerly U.S.N.M. 4,531). Canada, Mackenzie, Fort Simpson. 7 September 1859. Robert Kennicott.

= *Peromyscus maniculatus borealis* Mearns.

HYPUDAEUS NIVICOLA Schinz

Syst. Verzeichniss aller bis jetzt bekannten Säugetiere oder Synopsis Mammalium, 2, p. 236, 1845.

Probable cotype, skin and skull, M. C. Z. 1,290. Swiss Alps.

NOTE.—This specimen was received many years ago through Louis Agassiz. The original label bears the following, in a stereotyped German handwriting: "Hypodaeus nivicola juv. ♀ sp. nov. du St. Gotthard et du Faulhorn. Annales des sciences naturelles 1843." In a footnote to the original description, Schinz says that Wagner's *Hypudaeus alpinus*, a name he includes in the synonymy of *nivicola*, is unrecognizable; Martins' *Arricola nivalis*, to which the reference on the label applies, is, however, accompanied by a good figure. In setting up the name *nivicola*, Schinz sweeps aside the two synonyms, and bases his description on a series of "16 junge und alte." Since Louis Agassiz was for two years a student of Schinz's, and in view of the likelihood that this was one of the 16 specimens above mentioned, and probably given to Agassiz by Schinz, it seems reasonable to consider it a cotype.

= *Microtus (Chionomys) nivalis* (Martins).

LEMMUS PAULUS G. M. Allen

Proc. New England Zoöl. Club, 5, p. 60, 9 April 1914.

*Holotype*.—Male, skin and skull, M. C. Z. 15,268. Northeastern Siberia, Kalaschowo, near mouth of Kolyma River. 22 June 1912. Johan Koren.

MEGADONTOMYS FLAVIDUS Bangs.

Bull. Mus. Comp. Zoöl., 39, p. 27, figs. 5-7, April 1902.

*Holotype*.—Male, skin and skull, M. C. Z. 10,331. Panama, Chiriquí, Boquete, 4,000 feet. 12 April 1901. W. W. Brown, Jr.

= *Peromyscus flavidus* (Bangs).

MICROTUS (EOTHENOMYS) AURORA G. M. Allen

Mem. Mus. Comp. Zoöl., 40, p. 211, figs. A, B, August 1912.

*Holotype*.—Male, skin and skull, M. C. Z. 7,788. China, Hupeh, Changyanghsien. 2 February 1909. Walter R. Zappey.

**MICROTUS CHROTORRHINUS RAVUS Bangs**

Proc. Biol. Soc. Washington, **12**, p. 188, 16 November 1898.

*Holotype*.—Male, skin and skull, 7,951 (E. A. and O. Bangs Coll.). Labrador, Strait of Belle Isle, Black Bay. 15 July 1898. Ernest Doane.

**MICROTUS ENIXUS Bangs**

Amer. Nat., **30**, p. 1051, 1 December 1896.

*Holotype*.—Female, skin and skull, 3,973 (E. A. and O. Bangs Coll.). Labrador, Hamilton Inlet. 15 July 1895. C. H. Goldthwaite.

**MICROTUS FONTIGENUS Bangs**

Proc. Biol. Soc. Washington, **10**, p. 48, 9 March 1896.

*Holotype*.—Female, skin and skull, 3,837 (E. A. and O. Bangs Coll.). Quebec, Lake Edward. 28 September 1895. E. A. and O. Bangs.

= *Microtus pennsylvanicus fontigenus* Bangs.

**MICROTUS KORENI G. M. Allen**

Proc. New England Zoöl. Club, **5**, p. 64, 9 April 1914.

*Holotype*.—Female, skin and skull, M. C. Z. 15,213. Northeastern Siberia, Nijni Kolymsk, near mouth of Kolyma River. 1 November 1911. Johan Koren.

**MICROTUS (EOTHENOMYS) MUCRONATUS G. M. Allen**

Mem. Mus. Comp. Zoöl., **40**, p. 214, figs. C, D, August 1912.

*Holotype*.—Female, skin and skull, M. C. Z. 7,789. China, western Szechwan, Tachiao, 12,000 feet. 11 August 1908. Walter R. Zappey.

**MICROTUS PENNSILVANICUS (SIC) SHATTUCKI Howe**

Proc. Portland Soc. Nat. Hist., **2**, p. 201, 31 December 1901.

*Holotype*.—Female, skin and skull, M. C. Z. 10,011. Maine, Penobscot Bay, Tumble Down Dick Island. 10 July 1900. R. Heber Howe, Jr., and George C. Shattuck.

= *Microtus pennsylvanicus pennsylvanicus* Ord.

**MICROTUS PENNSYLVANICUS ACADICUS Bangs**

Amer. Nat., **31**, p. 239, 1 March 1897.

*Holotype*.—Female, skin and skull, 2,155 (E. A. and O. Bangs Coll.). Nova Scotia, Digby. 22 July 1894. Outram Bangs.

**MICROTUS PROVICTUS Bangs**

Proc. New England Zoöl. Club, 4, p. 20, 6 March 1908.

*Holotype*.—Female, skin and skull, 9,794 (E. A. and O. Bangs Coll.). Rhode Island, Block Island. 5 August 1899. Outram Bangs.

**MUS BAIRDII Hoy and Kennicott**

Rept. U. S. Commissioner of Patents for 1856, Agriculture, p. 92, pl. 11, July 1857.

*Cotype*.—Skin and skull, M. C. Z. 8,073 (formerly U. S. N. M. 650). Illinois, West Northfield. 15 April 1855. Robert Kennicott. From Smithsonian Institution.

NOTE.—No type is specified in the original description but the above specimen, collected by Kennicott at the type locality, agrees in measurements very well with the second specimen he mentions, and is one of the two skins listed by Baird in *Mammals of North America*, 1857, p. 478. It should, no doubt, be considered a cotype. Four alcoholic specimens in the Museum (4,340–4,343), also taken by Kennicott at West Northfield, Illinois, were probably not collected prior to 1857 as indicated by their original (Smithsonian Institution) numbers.

= *Peromyscus maniculatus bairdi* (Hoy and Kennicott)

**MYOPUS THAYERI G. M. Allen**

Proc. New England Zoöl. Club, 5, p. 58, 9 April 1914.

*Holotype*.—Male, skin and skull, M. C. Z. 15,264. Northeastern Siberia, Nijni Kolymsk, near mouth of Kolyma River. 28 March 1912. Johan Koren.

**NEOTOMA ABBREVIATA Goldman**

Proc. Biol. Soc. Washington, 22, p. 140, 25 June 1909.

*Holotype*.—Male, skin and skull, M. C. Z. 12,260. Mexico, Lower California, San Francisco Island. 22 February 1909. W. W. Brown, Jr.

**NEOTOMA BELLA Bangs**

Proc. New England Zoöl. Club, 1, p. 66, 31 July 1899.

*Holotype*.—Male, skin and skull, 5,308 (E. A. and O. Bangs Coll.). California, Riverside County, Palm Springs. 12 April 1896. E. C. Thurber.

= *Neotoma desertorum* Merriam.

**NEOTOMA DISTINCTA Bangs**

Proc. Biol. Soc. Washington, **16**, p. 89, 25 June 1903.

*Holotype*.—Male, skin and skull, 9,819 (E. A. and O. Bangs Coll.). Mexico, Vera Cruz, Texolo. 8 March 1899. S. N. Rhoads.

**NEOTOMA FLORIDANA RUBIDA Bangs**

Proc. Boston Soc. Nat. Hist., **28**, p. 185, March 1898.

*Holotype*.—Male, skin and skull, 2,872 (E. A. and O. Bangs Coll.). Louisiana, Terrebonne Parish, Gibson. 4 April 1895. F. L. Small.

**NEOTOMA FUSCIPES Baird**

Mammals of N. America, p. 495, 1857 (apud Cooper MS.).

Of the five specimens on which Baird founded this species, the following are in the collection:

M. C. Z. 4,336, cotype, in alcohol. California, Petaluma. February 1856. E. Samuels. From Smithsonian Institution, 1873 (formerly U. S. N. M. 2,680).

M. C. Z. 5,264, cotype, skin. California, Santa Clara County. November 1855. J. G. Cooper. From Smithsonian Institution, 1873 (formerly U. S. N. M. 1,159).

NOTE.—No type is specified in the original description, which is based on five specimens. Most of the account, however, is drawn from U. S. N. M. 2,679 from Petaluma, which, for this reason, Lyon and Osgood have regarded as "the type"—now a prepared skeleton, U. S. N. M. 22,026. While strictly all five specimens are cotypes, the above two would, according to these authors, become paratypes.

= *Neotoma fuscipes annectens* Elliot.

**NYCTOMYS NITELLINUS Bangs**

Bull. Mus. Comp. Zoöl., **39**, p. 30, figs. 11, 12, April 1902.

*Holotype*.—Female, skin and skull, M. C. Z. 10,249. Panama, Chiriquí, Boquete, 4,000 feet. 8 February 1901. W. W. Brown, Jr.

= *Nyctomys sumichrasti nitellinus* Bangs.

**OECOMYS TRABEATUS G. M. Allen and T. Barbour**

Bull. Mus. Comp. Zoöl., **65**, p. 262, 26 February 1923.

*Holotype*.—Adult male, skin and skull, M. C. Z. 19,837. Eastern Panama, Rio Jesusito. 10 April 1922. Thomas Barbour and W. Sprague Brooks.

### ORYZOMYS DEVIUS Bangs

Bull. Mus. Comp. Zoöl., **39**, p. 34, figs. 13, 14, April 1902.

*Holotype*.—Female, skin and skull, M. C. Z. 10,324. Panama, Chiriquí, Boquete, 5,000 feet. 29 January 1901. W. W. Brown, Jr.

### ORYZOMYS FLAVICANS ILLECTUS Bangs

Proc. Biol. Soc. Washington, **12**, p. 164, 10 August 1898.

*Holotype*.—Male, skin and skull, 8,101 (E. A. and O. Bangs Coll.). Colombia, Santa Marta Mountains, Pueblo Viejo, 8,000 feet. 24 March 1898. W. W. Brown, Jr.

### ORYZOMYS (ERIORYZOMYS) MONOCHROMOS Bangs

Proc. New England Zoöl. Club, **1**, p. 97, 23 February 1900.

*Holotype*.—Male, skin and skull, 8,348 (E. A. and O. Bangs Coll.). Colombia, Santa Marta Mountains, Paramo de Macotama, 11,000 feet. 7 March 1899. W. W. Brown, Jr.

= *Thomasomys monochromos* (Bangs).

### ORYZOMYS NAVUS Bangs

Proc. Biol. Soc. Washington, **13**, p. 9, 31 January 1899.

*Holotype*.—Male, skin and skull, 8,107 (E. A. and O. Bangs Coll.). Colombia, Santa Marta Mountains, Pueblo Viejo, 8,000 feet. 26 March 1898. W. W. Brown, Jr.

### ORYZOMYS PALUSTRIS COLORATUS Bangs

Proc. Boston Soc. Nat. Hist., **28**, p. 189, March 1898.

*Holotype*.—Male, skin and skull, 4,470 (E. A. and O. Bangs Coll.). Florida, Cape Sable. 17 April 1895. C. L. Brownell.

### ORYZOMYS (OLIGORYZOMYS) VEGETUS Bangs

Bull. Mus. Comp. Zoöl., **39**, p. 35, fig. 15, April 1902.

*Holotype*.—Female, skin and skull, M. C. Z. 10,298. Panama, Chiriquí, Boquete, 4,000 feet. 16 April 1901. W. W. Brown, Jr.

= *Oryzomys fulvescens vegetus* Bangs.

## PEROMYSCUS ANASTASAE Bangs

Proc. Boston Soc. Nat. Hist., **28**, p. 195, March 1898.

*Holotype*.—Female, skin and skull, 7,179 (E. A. and O. Bangs Coll.). Florida, Anastasia Island, Point Romo. 15 February 1897. Outram Bangs.

= *Peromyscus gossypinus anastasae* Bangs.

## PEROMYSCUS BELLUS Bangs

Proc. Biol. Soc. Washington, **10**, p. 137, 28 December 1896.

*Holotype*.—Female, skin and skull, 5,483 (E. A. and O. Bangs Coll.). Oklahoma, Adair County, Stilwell. 15 August 1896. Thaddeus Surber.

= *Peromyscus boylii attwateri* J. A. Allen.

## PEROMYSCUS CACABATUS Bangs

Bull. Mus. Comp. Zoöl., **39**, p. 29, figs. 8–10, April 1902.

*Holotype*.—Female, skin and skull, M. C. Z. 10,225. Panama, Chiriquí, Boquete, 5,000 feet. 22 April 1901. W. W. Brown, Jr.

= *Peromyscus nudipes* (J. A. Allen).

## PEROMYSCUS CANADENSIS ABIETORUM Bangs

Proc. Biol. Soc. Washington, **10**, p. 49, 9 March 1896.

*Holotype*.—Female, skin and skull, 2,205 (E. A. and O. Bangs Coll.). Nova Scotia, James River. 8 August 1894. C. H. Goldthwaite.

= *Peromyscus maniculatus abietorum* Bangs.

## PEROMYSCUS CRINITUS SCITULUS Bangs

Proc. New England Zoöl. Club, **1**, p. 67, 31 July 1899.

*Holotype*.—Male, skin and skull, 9,175 (E. A. and O. Bangs Coll.). Nevada, Douglas County, Gardnerville. 13 July 1898. W. W. Price and P. O. Simons.

= *Peromyscus crinitus crinitus* (Merriam).

## PEROMYSCUS GOSSYPINUS NIGRICULUS Bangs

Proc. Biol. Soc. Washington, **10**, p. 124, 5 November 1896.

*Holotype*.—Female, skin and skull, 2,731 (E. A. and O. Bangs Coll.). Louisiana, Plaquemines Parish, Burbridge. 30 January 1895. F. L. Small.

= *Peromyscus gossypinus gossypinus* (Le Conte).

**PEROMYSCUS GOSSYPINUS PALMARIUS Bangs**

Proc. Biol. Soc. Washington, **10**, p. 124, 5 November 1896.

*Holotype*.—Female, skin and skull, 3,224 (E. A. and O. Bangs Coll.). Florida, Brevard County, Oak Lodge, on east peninsula opposite Micco. 23 February 1895. Outram Bangs.

**PEROMYSCUS INSULANUS Bangs**

Proc. Boston Soc. Nat. Hist., **28**, p. 196, March 1898.

*Holotype*.—Male, skin and skull, 6,438 (E. A. and O. Bangs Coll.). Georgia, Cumberland Island. 10 April 1897. W. W. Brown, Jr.  
= *Peromyscus gossypinus anastasae* Bangs.

**PEROMYSCUS LEUCOPUS AMMODYTES Bangs**

Proc. New England Zoöl. Club, **4**, p. 14, 28 February 1905.

*Holotype*.—Male, skin and skull, 828 (E. A. and O. Bangs Coll.). Massachusetts, Monomoy Island. 28 December 1893. Outram Bangs.

**PEROMYSCUS LEUCOPUS FUSUS Bangs**

Proc. New England Zoöl. Club, **4**, p. 13, 28 February 1905.

*Holotype*.—Male, skin and skull 9,737 (E. A. and O. Bangs Coll.). Massachusetts, Marthas Vineyard, West Tisbury. 17 June 1899. Outram Bangs.

**PEROMYSCUS OREAS Bangs**

Proc. Biol. Soc. Washington, **12**, p. 84, 24 March 1898.

*Holotype*.—Female, skin and skull, 3,696 (E. A. and O. Bangs Coll.). British Columbia, 49th parallel, Mt. Baker Range, 6,500 feet. 29 August 1896. Allan C. Brooks.

= *Peromyscus maniculatus oreas* Bangs.

**PEROMYSCUS PHASMA Bangs**

Proc. Boston Soc. Nat. Hist., **28**, p. 199, March 1898.

*Holotype*.—Female, skin and skull, 7,175 (E. A. and O. Bangs Coll.). Florida, Anastasia Island, Point Romo. 15 February 1897. Outram Bangs.

= *Peromyscus polionotus phasma* Bangs.

### PEROMYSCUS SUBGRISEUS BALIOLUS Bangs

*Peromyscus subgriseus arenarius* Bangs, Proc. Boston Soc. Nat. Hist., **28**, p. 202, March 1898 (not *P. eremicus arenarius* Mearns, 1896); renamed in Science, new ser., **8**, p. 215, 19 August 1898.

*Holotype*.—Male, skin and skull, 5,925 (E. A. and O. Bangs Coll.). Georgia, Scriven County, Hursman's Lake (Savannah River), near Bascom. 15 December 1896. W. W. Brown, Jr.

= *Peromyscus polionotus polionotus* (Wagner).

### PEROMYSCUS SUBGRISEUS RHOADSI Bangs

Proc. Boston Soc. Nat. Hist., **28**, p. 201, March 1898.

*Holotype*.—Male, skin and skull, 6,980 (E. A. and O. Bangs Coll.). Florida, Hillsboro County, head of Anclote River. 23 May 1895. W. S. Dickinson.

= *Peromyscus polionotus rhoadsi* Bangs.

### PEROMYSCUS TEXANUS SATURATUS Bangs

Amer. Nat., **31**, p. 75, 1 January 1897.

*Holotype*.—Male, skin and skull, 2,581 (E. A. and O. Bangs Coll.). British Columbia, Saturna Island. 31 January 1894. W. C. Colt.

= *Peromyscus maniculatus saturatus* Bangs.

### PHENACOMYS CELATUS CRASSUS Bangs

Proc. New England Zoöl. Club, **2**, p. 39, 20 September 1900.

*Holotype*.—Male, skin and skull, 3,959 (E. A. and O. Bangs Coll.). Labrador, Hamilton Inlet, Rigoulette. 15 August 1895. C. H. Goldthwaite.

= *Phenacomys ungava crassus* Bangs.

### REITHRODONTOMYS AUSTRALIS VULCANIUS Bangs

Bull. Mus. Comp. Zoöl., **39**, p. 38, figs. 16, 17, April 1902.

*Holotype*.—Male, skin and skull, M. C. Z. 10,281. Panama, Chiriquí, Volcan de Chiriquí, 10,300 feet. 26 May 1901. W. W. Brown, Jr.

= *Reithrodontomys australis australis* J. A. Allen.

**REITHRODONTOMYS CREPER** Bangs

Bull. Mus. Comp. Zoöl., **39**, p. 39, figs. 18, 19, April 1902.

*Holotype*.—Female, skin and skull, M. C. Z. 10,284. Panama, Chiriquí, Volcan de Chiriquí, 11,000 feet. 2 June 1901. W. W. Brown, Jr.

**REITHRODONTOMYS LECONTII IMPIGER** Bangs

Proc. Biol. Soc. Washington, **12**, p. 167, 10 August 1898.

*Holotype*.—Male, skin and skull, 7,784 (E. A. and O. Bangs Coll.). West Virginia, White Sulphur Springs. 27 February 1898. Thaddeus Surber.

= *Reithrodontomys humulis impiger* Bangs.

**SIGMODON AUSTERULUS** Bangs

Bull. Mus. Comp. Zoöl., **39**, p. 32, April 1902.

*Holotype*.—Male, skin and skull, M. C. Z. 10,288. Panama, Chiriquí, Volcan de Chiriquí, 10,000 feet. 1 June 1901. W. W. Brown, Jr.

**SIGMODON HISPIDUS EXSPUTUS** G. M. Allen

Journ. Mammalogy, **1**, p. 236, 4 December 1920.

*Holotype*.—Adult male, skin and skull, M. C. Z. 18,100. Big Pine Key, Florida. 16 April 1920. W. Sprague Brooks.

**SIGMODON HISPIDUS FERVIDUS** Lydekker

Zoöl. Record for 1903, **40**, Mammalia, p. 34, 1904.

*Holotype*.—Malé, skin and skull, M. C. Z. 10,665. Honduras, Ceiba. 16 January 1902. W. W. Brown, Jr.

= *Sigmodon hispidus furvus* Bangs (accidental renaming).

**SIGMODON HISPIDUS FURVUS** Bangs

Bull. Mus. Comp. Zoöl., **39**, p. 158, July 1903.

*Holotype*.—Male, skin and skull, M. C. Z. 10,665. Honduras, Ceiba. 16 January 1902. W. W. Brown, Jr.

## SIGMODON HISPIDUS SPADICIPYGUS Bangs

Proc. Boston Soc. Nat. Hist., **28**, p. 192, March 1898.

*Holotype*.—Female, skin and skull, 4,477 (E. A. and O. Bangs Coll.). Florida, Cape Sable. 18 April 1895. C. L. Brownell.

## SIGMODON SANCTAE-MARTAE Bangs

Proc. Biol. Soc. Washington, **12**, p. 189, 30 December 1898.

*Holotype*.—Male, skin and skull, 8,105 (E. A. and O. Bangs Coll.). Colombia, Santa Marta Mountains, Pueblo Viejo, 8,000 feet. 23 March 1898. W. W. Brown, Jr.

## SYNAPTOMYS FATUUS Bangs

Proc. Biol. Soc. Washington, **10**, p. 47, 9 March 1896.

*Holotype*.—Female, skin and skull, 3,857 (E. A. and O. Bangs Coll.). Quebec, Lake Edward. 28 September 1895. E. A. and O. Bangs.

= *Synaptomys cooperi cooperi* Baird.

## SYNAPTOMYS (MICTOMYS) INNUITUS MEDIOXIMUS Bangs

Proc. New England Zoöl. Club, **2**, p. 40, 20 September 1900.

*Holotype*.—Male, skin and skull, 8,852 (E. A. and O. Bangs Coll.). Labrador, Lance au Loup. 15 April 1899. Ernest Doane.

= *Synaptomys borealis medioximus* Bangs.

## ZYGODONTOMYS SEORSUS Bangs

Amer. Nat., **35**, p. 642, August 1901.

*Holotype*.—Male, skin and skull, 8,490 (E. A. and O. Bangs Coll.). Panama Bay, San Miguel Island. 5 May 1900. W. W. Brown, Jr.

## MURIDAE

## APODEMUS MYSTACINUS EUXINUS G. M. Allen

Bull. Mus. Comp. Zoöl., **59**, p. 11, February 1915.

*Holotype*.—Male, skin and skull, M. C. Z. 14,887. Asia Minor, Scalita (near Trebizond). 25 November 1905. A. Robert.

**EPIMYS ZAPPEYI G. M. Allen**

Mem. Mus. Comp. Zoöl., **40**, p. 225, August 1912.

*Holotype*.— Male, skin and skull, M. C. Z. 7,607. China, Szechwan, Washan Mountains. 26 October 1908. Walter R. Zappey.

= *Rattus excelsior zappeyi* (G. M. Allen).

**HYLOMYSCUS ALLENI SIMUS G. M. Allen and H. J. Coolidge, Jr.**

In R. P. Strong's The African Republic of Liberia (Cambridge, Mass.), **2**, p. 599, October 1930.

*Holotype*.— Male, skin and skull, M. C. Z. 24,028. Liberia, Merikay. 13 September 1926. G. M. Allen and H. J. Coolidge, Jr.

**TATERA FLAVIPES G. M. Allen**

Bull. Mus. Comp. Zoöl., **58**, p. 331, fig. 2, July 1914.

*Holotype*.— Female, skin and skull, M. C. Z. 14,491. Sudan, Blue Nile, Aradeiba, above Roseires. 22 January 1913. J. C. Phillips' Sudan Expedition.

**TATERA SOROR G. M. Allen**

Bull. Mus. Comp. Zoöl., **58**, p. 333, fig. 3, July 1914.

*Holotype*.— Female, skin and skull, M. C. Z. 14,492. Sudan, Blue Nile, Fazogli. 16 January 1913. J. C. Phillips' Sudan Expedition.

**TATERILLUS MELANOPS G. M. Allen**

Bull. Mus. Comp. Zoöl., **54**, p. 446, April 1912.

*Holotype*.— Male, skin and skull, M. C. Z. 8,132. Kenya Colony, Meru River, an affluent of the northern Guaso Nyiro. 11 August 1909. G. M. Allen.

**THAMNOMYS OCHRACEUS G. M. Allen**

Bull. Mus. Comp. Zoöl., **54**, p. 442, April 1912.

*Holotype*.— Male, skin and skull, M. C. Z. 8,126. Kenya Colony, Meru River near its junction with northern Guaso Nyiro. 8 August 1909. G. M. Allen.

= *Thamnomys macmillani ochraceus* G. M. Allen.

## APLODONTIIDAE

## APLODONTIA CALIFORNICA COLUMBIANA Taylor

Univ. of California Publ., Zoöl., 12, p. 499, 6 May 1916.

*Holotype*.—Skin and skull, 1,899 (E. A. and O. Bangs Coll.). British Columbia, Hope, Roab's Ranch. 14 June 1894. W. C. Colt.

= *Apłodontia rufa columbiana* Taylor.

## ZAPODIDAE

## ZAPUS HUDSONIUS LADAS Bangs

Proc. New England Zoöl. Club, 1, p. 10, 28 February 1899.

*Holotype*.—Female, skin and skull, 4,169 (E. A. and O. Bangs Coll.). Labrador, Hamilton Inlet, Rigoulette. 18 July 1895. C. H. Goldthwaite.

## ZAPUS ORARIUS Preble

N. American Fauna (U. S. Dept. Agric., Biol. Surv.), no. 15, p. 29, 8 August 1899.

*Holotype*.—Male, skin and skull, 250 (E. A. and O. Bangs Coll.). California, Marin County, Point Reyes. 14 May 1893. Charles A. Allen.

## PEDETIDAE

## PEDETES CAFER TABORAE G. M. Allen and A. Loveridge

Proc. Boston Soc. Nat. Hist., 38, p. 438, 19 December 1927.

*Holotype*.—Adult female, skin and skull, M. C. Z. 23,080. Tanganyika Territory, Tabora. 18 November 1921. Arthur Loveridge.

## BATHYERGIDAE

## HETEROCEPHALUS STYGIUS G. M. Allen

Bull. Mus. Comp. Zoöl., 54, p. 444, April 1912.

*Holotype*.—Female in alcohol and dry skull, M. C. Z. 12,470. Kenya Colony, northern Guaso Nyiro, Neumann's Boma. 6 August 1909. G. M. Allen.

= *Heterocephalus glaber* Rüppell.

## † THERIDOMYIDAE

NOTE.—The type specimen of *Theridomys siderolithicus* Pictet, originally in the Campiche Collection, is not now to be found. A speci-

men referred to this species by Pictet (Mat. Paléont. Suisse, 1855-57, pt. 2, pl. 6, figs. 12, 13) is M. C. Z. 5,812.

### ERETHIZONTIDAE

#### ERETHIZON DORSATUS PICINUS Bangs

Proc. New England Zoöl. Club, **2**, p. 37, 20 September 1900.

*Holotype*.—Male, skin and skull, 8,839 (E. A. and O. Bangs Coll.). Labrador, Strait of Belle Isle, Lance [=L'Anse] au Loup. 16 February 1899. Ernest Doane.

= *Erethizon dorsatum picinum* Bangs.

### ECHIMYIDAE

#### † BOROMYS TORREI G. M. Allen

Bull. Mus. Comp. Zoöl., **61**, p. 6, pl., figs. 10-13, January 1917.

*Holotype*.—Palate with root of right zygomatic arch, two teeth in place, M. C. Z. 9,601. Cuba, Province of Matanzas, cave in Sierra de Hato Nuevo. Carlos de la Torre.

#### CAPROMYS PILORIDES RELICTUS G. M. Allen

Bull. Mus. Comp. Zoöl., **54**, p. 207, July 1911.

*Holotype*.—Male, skin and skull, M. C. Z. 10,996. Cuba, Isle of Pines, Nueva Gerona, Casas Mountains. 10 March 1902. W. R. Zappey.

#### CAPROMYS NANA G. M. Allen

Proc. New England Zoöl. Club, **6**, p. 54, 28 March 1917.

*Holotype*.—Right lower mandible, M. C. Z. 9,864. Cuba, Province of Matanzas, cave in Sierra de Hato Nuevo. Thomas Barbour.

#### † GEOCAPROMYS CUBANUS G. M. Allen

Bull. Mus. Comp. Zoöl., **61**, p. 9, pl., figs. 7-9, January 1917.

*Holotype*.—Part of right lower ramus containing incisor and three cheek-teeth, M. C. Z. 9,602. Cuba, Province of Matanzas, cave in Sierra de Hato Nuevo. Carlos de la Torre.

= † *Geocapromys columbianus* (Chapman).

**LONCHERES LABILIS Bangs**

Amer. Nat., **35**, p. 638, 3 figs., August 1901.

*Holotype*.—Male, skin and skull, 8,480 (E. A. and O. Bangs Coll.). Panama, Panama Bay, San Miguel Island. 26 April 1900. W. W. Brown, Jr.

= *Diplomys labilis* (Bangs).

**PROECHIMYS BURRUS Bangs**

Amer. Nat., **35**, p. 640, fig., August 1901.

*Holotype*.—Male, skin and skull, 8,458 (E. A. and O. Bangs Coll.). Panama, Bay of Panama, San Miguel Island. 30 April 1900. W. W. Brown, Jr.

= *Proechimys semispinosus burrus* Bangs.

**PROECHIMYS GORGONAE Bangs**

Bull. Mus. Comp. Zoöl., **46**, p. 89, June 1905.

*Holotype*.—Male, skin and skull, M. C. Z. 10,828. Colombia, Gorgona Island. 2 July 1904. W. W. Brown, Jr.

**DASYPROCTIDAE****DASYPROCTA CALLIDA Bangs**

Amer. Nat., **35**, p. 635, fig., August 1901.

*Holotype*.—Male, skin and skull, 8,443 (E. A. and O. Bangs Coll.). Panama, Bay of Panama, San Miguel Island. 8 May 1900. W. W. Brown, Jr.

**DASYPROCTA COLOMBIANA Bangs**

Proc. Biol. Soc. Washington, **12**, p. 163, 10 August 1898.

*Holotype*.—Female, skin and skull, 8,008 (E. A. and O. Bangs Coll.). Colombia, Santa Marta. 6 January 1898. W. W. Brown, Jr.

**DASYPROCTA NOBLEI G. M. Allen**

Proc. New England Zoöl. Club, **5**, p. 69, 7 October 1914.

*Holotype*.—Female, skin and skull, M. C. Z. 15,936. West Indies, Guadeloupe Island, Goyave. 22 August 1914. G. K. Noble.

**DASYPROCTA PUNCTATA NUCHALIS** Goldman

Proc. Biol. Soc. Washington, **30**, p. 113, 23 May 1917.

*Holotype*.—Female, skin and skull, 10,081 (E. A. and O. Bangs Coll.). Panama, Chiriquí, Divalá. 30 November 1900. W. W. Brown, Jr.

**CUNICULIDAE****AGOUTI PACA VIRGATUS** Bangs

Bull. Mus. Comp. Zoöl., **39**, p. 47, April 1902.

*Holotype*.—Male, skin and skull, M. C. Z. 10,079. Panama, Chiriquí, Divalá. 16 December 1900. W. W. Brown, Jr.

= *Cuniculus paca virgatus* (Bangs).

**LAGOMORPHA****OCHOTONIDAE****OCHOTONA CUPPES** Bangs

Proc. New England Zoöl. Club, **1**, p. 40, 5 June 1899.

*Holotype*.—Male, skin and skull, 7,389 (E. A. and O. Bangs Coll.). British Columbia, Gold Range, Monishee Divide, 4,000 feet. 12 August 1897. Allan C. Brooks.

= *Ochotona princeps cuppes* Bangs.

**OCHOTONA SAXATILIS** Bangs

Proc. New England Zoöl. Club, **1**, p. 41, 5 June 1899.

*Holotype*.—Male, skin, M. C. Z. 2,703. Colorado, Park County, Snowy Range, Montgomery, near limit of trees. 27 July 1871. Rocky Mountain Expedition, J. A. Allen.

= *Ochotona princeps saxatilis* Bangs.

**LEPORIDAE****LEPUS (MACROTOLAGUS) ALLENI PALITANS** Bangs

Proc. New England Zoöl. Club, **1**, p. 85, 23 February 1900.

*Holotype*.—Female, skin and skull, 9,096 (E. A. and O. Bangs Coll.). Mexico, Sinaloa, Aguacaliente (about forty miles southeast of Mazatlán). 7 August 1897. P. O. Simons.

**LEPUS AMERICANUS STRUTHOPUS Bangs**

Proc. Biol. Soc. Washington, **12**, p. 81, 24 March 1898.

*Holotype*.—Female, skin and skull, 2,025 (E. A. and O. Bangs Coll.). Nova Scotia, Digby. 4 August 1894. Outram Bangs.

**LEPUS ARCTICUS BANGSI Rhoads**

Amer. Nat., **30**, p. 236, 20 February (author's separates), 1896.

*Holotype*.—Female, skin and skull, 3,752 (E. A. and O. Bangs Coll.). Newfoundland, Codroy. 3 August 1895. Ernest Doane.

**LEPUS BAIRDI Hayden**

Amer. Nat., **3**, p. 115, fig., May 1869.

*Cotype*.—Skin and skull, M. C. Z. 500 (formerly U. S. N. M. 4,264). Wyoming, summit of Wind River Mountains, near Fremont Peak. 4 June 1860. Dr. F. V. Hayden. Gift of Smithsonian Institution, May 1876.

NOTE.—No type was designated but the description was based on six specimens, of which three were young. Of the three adults, but one is now to be found in the United States National Museum (see Bull. U. S. Nat. Mus., no. 62, p. 27, 1909). The above specimen in white winter pelage is now made over into a good study skin and the skull, nearly perfect, has been removed and cleaned.

**LEPUS BAIRDI CASCADENSIS Nelson**

Proc. Biol. Soc. Washington, **20**, p. 87, 11 December 1907.

*Holotype*.—Male, skin and skull, 1,886 (E. A. and O. Bangs Coll.). British Columbia, near Hope, Roab's Ranch. 12 June 1894. W. C. Colt.

**LEPUS (TAPETI) INCITATUS Bangs**

Amer. Nat., **35**, p. 633, fig., August 1901.

*Holotype*.—Female, skin and skull, 8,441 (E. A. and O. Bangs Coll.). Panama, Panama Bay, San Miguel Island. 30 April 1900. W. W. Brown, Jr.

= *Sylvilagus gabbi incitatus* (Bangs).

**LEPUS PALUDICOLA** Miller and Bangs

Proc. Biol. Soc. Washington, **9**, p. 105, 9 June 1894.

*Holotype*.—Female, skin and skull, 1,451 (E. A. and O. Bangs Coll.). Florida, Citrus County, Fort Island, near Crystal River. 28 January 1894. F. L. Small.

= *Sylvilagus palustris paludicola* (Miller and Bangs).

**LEPUS SYLVATICUS ALACER** Bangs

Proc. Biol. Soc. Washington, **10**, p. 136, 28 December 1896.

*Holotype*.—Female, skin and skull, 5,480 (E. A. and O. Bangs Coll.). Oklahoma, Stilwell. 14 August 1896. Thaddeus Surber.

= *Sylvilagus floridanus alacer* (Bangs).

**LEPUS SYLVATICUS TRANSITIONALIS** Bangs

Proc. Boston Soc. Nat. Hist., **26**, p. 405, 31 January 1895.

*Holotype*.—Male, skin and skull, 2,407 (E. A. and O. Bangs Coll.). Connecticut, Liberty Hill. 6 November 1894. Outram Bangs.

= *Sylvilagus transitionalis* (Bangs).

**ARTIODACTYLA**

† **DICHOBUNIDAE**

† **DICHOBUNE CAMPICHI** Pictet

Matériaux pour la Paléontol. Suisse, ser. 1, part 2, Mémoire sur les animaux vertébrés trouvés dans le terrain sidérolitique du canton du Vaud, part 2, p. 57, pl. 4, figs. 5–9, 1855–1857.

*Holotype*.—Anterior portion of lower jaws, M. C. Z. 5,465 (the tip of the right canine, shown in Pictet's figure, is now lost). Switzerland, Mauremont (Eocene). Campiche Collection.

= † *Metadichobune campichi* (Pictet).

† **DICHOBUNE SUILLUM** Gervais

Zoöl. et Paléont. Françaises, ed. 2, p. 94, pl. 17, figs. 11–18, and explanation, 1848–1852.

Three of the cotypes, viz. part of lower ramus with three teeth in place, M. C. Z. 4,750 (original of Gervais' fig. 11); lower molar doubtfully referred to this species, M. C. Z. 9,217 (original of Gervais' fig. 16);

lower incisor, M. C. Z. 5,856 (original of Gervais' fig. 12). One incisor and two foot bones figured by Gervais and referred to this species, are not now to be found in the Duval Collection. France, Passy (Middle Eocene). Duval Collection.

### SUIDAE

#### † *CHOEROPOTAMUS MATRITENSIS* Ezquerra del Bayo

Neues Jahrb. f. Mineral., p. 221, 1840.

*Cotypes*.—Two upper molars, lacking roots, M. C. Z. 4,840, 4,841. Spain, near Madrid, Cerro de San Isidro. 1838-39. Ezquerra del Bayo, Bronn Coll.

NOTE.—As originally published, this appears to be a *nomen nudum*. It is clear, however, that the name is based on the description of the two teeth by Kaup (Neues Jahrb. f. Mineral., p. 540, 1840, with the contents of whose paper Ezquerra was evidently familiar, though the paper itself did not appear until later in the volume. H. von Meyer (*ibid.*, 1844, p. 288) quotes the name as of Ezquerra, but though he again describes the specimens, he does not venture to regard them as representing a new species.

= † *Choeropotamus affinis* Gervais.

#### † *HYOTHERIUM* (?) *AMERICANUM* Scott and Osborn

Bull. Mus. Comp. Zoöl., 13, p. 155, September 1887.

*Cotype*.—A hind foot, M. C. Z. 9,155 (comprises an astragalus, cuboid, metatarsals II-V, two proximal phalanges of mt. IV, and the proximal phalanx of mt. V). South Dakota, White River (Oligocene). 1880-81. Samuel Garman.

NOTE.—A skull agreeing "very closely . . . with the *Hyotherium* of Europe" is mentioned in the original description as being in the Princeton Museum. Although not further described here, it is to be considered the other cotype of the species.

### TAYASSUIDAE

#### TAYASSU CRUSNIGRUM Bangs

Bull. Mus. Comp. Zoöl., 39, p. 20, April 1902.

*Holotype*.—Male, skin and skull, M. C. Z. 10,163. Panama, Chiriquí, Boquete, 4,000 feet. 13 April 1901. W. W. Brown, Jr.

= *Pecari angulatus crusnigrum* (Bangs).

## TAYASSU TORVUS Bangs

Proc. Biol. Soc. Washington, **12**, p. 164, 10 August 1898.

*Holotype*.—Male, skin and skull, 8,038 (E. A. and O. Bangs Coll.). Colombia, Santa Marta. 26 January 1898. W. W. Brown, Jr.  
= *Pecari angulatus torvus* (Bangs).

## † ENTELODONTIDAE

## † DINOHYUS (?) MENTO G. M. Allen

Bull. Mus. Comp. Zool., **67**, p. 450, pl. 1, July 1926.

*Holotype*.—Anterior portion of lower jaws, teeth missing, M. C. Z. 17,015. South Carolina, phosphate deposits of Ashley River, horizon unknown. Robert Wilson Collection.

## † ELOTERIUM SUPERBUM Leidy

Proc. Acad. Nat. Sci. Philadelphia, p. 177, 1868.

*Holotype*.—“Right upper lateral incisor,” M. C. Z. 9,564. California, Calaveras County, Douglas Flat (Miocene). J. D. Whitney Collection.  
= † *Entelodon superbum* (Leidy).

## † AGARIOCHOERIDAE

## † MERYCOCHOERUS COENOPUS Scott

Morph. Jahrb., **16**, p. 346, pl. 16, figs. 33, 34, 1890.

*Holotype*.—Manus and pes, distal end of a fibula and of an ulna, M. C. Z. 9,156. Nebraska, Loup Fork (Miocene). Samuel Garman.

*Note*.—The manus comprises all the carpalia, metatarsals III, IV, and V, the two proximal phalanges of digits II and IV, all three phalanges of digit III, and the proximal phalanx of digit V, right side. The pes consists of the cuboid, navicular, internal cuneiform, metatarsals II to V, the proximal phalanx of digit IV, two proximal phalanges of digit III, and the second phalanx of digit II—all of the right side. In addition there are: the astragalus, cuboid, and navicular of the left pes. All the bones are probably from one individual.

## CAMELIDAE

## † AUCHENIA CALIFORNICA Leidy

Proc. Acad. Nat. Sci. Philadelphia, p. 126, November 1870.

*Cotypes*.—Metacarpal, M. C. Z. 9,122; a distal extremity of a metacarpal, M. C. Z. 9,123; proximal end of femur, M. C. Z. 9,124; ace-

tabulum, M. C. Z. 9,125; two fragments of tibia, M. C. Z. 9,126, 9,127. California, Merced County, near the line of Mariposa, "on a nameless dry creek tributary to Bear Creek" (not Table Mountain, Tuolumne County, see Whitney, Mem. Mus. Comp. Zoöl., 6, p. 248, 1880). C. D. Voy.

= † *Camelops californicus* (Leidy).

#### CERVIDAE

##### CARIACUS OSCEOLA Bangs

Proc. Biol. Soc. Washington, 10, p. 26, 25 February 1896.

*Holotype*.—Female, skin and skull, 2,394 (E. A. and O. Bangs Coll.). Florida, Citrus County, Citronelle. 29 December 1893. F. L. Small.

= *Odocoileus virginianus osceola* (Bangs).

##### † CERVUS WHITNEYI J. A. Allen

Amer. Journ. Sci., ser. 3, 11, p. 48, January 1876.

*Cotypes*.—A left humerus lacking the head, M. C. Z. 10,985; a left radius lacking the proximal end (not *distal* end as stated in original description), M. C. Z. 10,986; a right metatarsal lacking the distal end, M. C. Z. 10,987. Iowa, Dubuque (lead crevices, Pleistocene). About 1857. J. D. Whitney.

NOTE.—There is nothing to indicate that these three bones appertain to the same individual or that they were found in the same locality. The locality given is that written on a general label placed with these and other bones in the Whitney Collection from the Lead Region.

= (?) † *Odocoileus whitneyi* (J. A. Allen).

##### ODOCOELUS (SIC) VIRGINIANUS LOUISIANAE G. M. Allen

Amer. Nat., 35, p. 449, fig., June 1901.

*Holotype*.—Male, skin and skull, 9,111 (E. A. and O. Bangs Coll.). Louisiana, Morehouse Parish, Mer Rouge. 8 November 1898. B. V. Lilly.

= *Odocoileus virginianus louisianae* (G. M. Allen).

##### ODOCOILEUS AMERICANUS BOREALIS Miller

Bull. N. Y. State Mus., 8, no. 38, p. 83, 21 November 1900 (but dated October).

*Holotype*.—Male, skin and skull, 4,999 (E. A. and O. Bangs Coll.). Maine, Bucksport. 12 December 1895. A. G. Dorr.

= *Odocoileus virginianus borealis* Miller.

**ODOCOILEUS VIRGINIANUS CLAVIUM** T. Barbour and G. M. Allen

Journ. Mammalogy, 3, p. 73, pl. 5, fig. 4, 9 May 1922.

*Holotype*.—Adult male, head-skin and skull, M. C. Z. 19,120. Florida, Big Pine Key. Winter, 1920.

**RANGIFER ARCTICUS CABOTI** G. M. Allen

Proc. New England Zoöl. Club, 4, p. 104, figs. 1-3, 24 March 1914.

*Holotype*.—A shed antler, M. C. Z. 15,372. Labrador, about thirty miles north of Nachvak. 1909. Owen Bryant.

**RANGIFER TERRAENOVAE** Bangs

Preliminary Description of the Newfoundland Caribou, Boston, A. Mudge & Son, p. [2], 11 November 1896.

*Holotype*.—Male, skin and skull, 3,778 (E. A. and O. Bangs Coll.). Newfoundland, Codroy. 8 September 1895. Ernest Doane.

**PERISSODACTYLA****† PALAEOTHERIIDAE****† PALAEOTHERIUM DUVALII** Pomel

Cat. Méthodique et Descr. des Vertébrés Foss. . . de la Loire, Paris, p. 81, 1853.

*Holotype*.—Skeletal fragments, possibly of one individual, viz. M. C. Z. 4,799, humerus; M. C. Z. 4,800, left ramus and symphysis of jaw; M. C. Z. 4,802, proximal end of femur; M. C. Z. 4,803, distal half of tibia; M. C. Z. 4,804, anterior end of left maxillary; M. C. Z. 4,807, calcaneum; M. C. Z. 5,438, astragalus. France, “environs de Paris.” Duval Collection.

**NOTE.**—Pomel bases this name directly upon the figures of Duval's specimens in Gervais' Plate 16 of Zoöl. et Paléontol. Françaises, ed. 2, 1848-52. Duval's specimens are, therefore, the types. In addition to the parts figured, the collection contains a proximal half of a tibia (M. C. Z. 4,805), the proximal end of a scapula (M. C. Z. 4,801), and part of a centrum (M. C. Z. 4,806).

= † *Palaeotherium curtum* Cuvier.

## EQUIDAE

† *ANCHITHERIUM EZQUERRAE* H. von Meyer

Neues Jahrb. f. Mineral., p. 299–305, 1844.

*Cotypes*.—A right lower penultimate molar, unworn, M. C. Z. 5,419; right upper penultimate molar, M. C. Z. 5,415; left upper penultimate molar, much worn, M. C. Z. 5,417; an incisor, lacking half the crown, M. C. Z. 5,420; crown of a smaller incisor, M. C. Z. 9,219; a middle phalanx, M. C. Z. 5,416; an ungual phalanx, M. C. Z. 5,418; a semilunar bone, M. C. Z. 5,421. Two other foot bones (M. C. Z. 5,422, 5,423) accompany these specimens but are not described. Spain, near Madrid, Cerro de San Isidro (upper Miocene). 1839. Ezquerra del Bayo. Brönn Collection.

= † *Anchitherium aurelianense* Cuvier.

† *EQUUS OCCIDENTALIS* Leidy

Proc. Acad. Nat. Sci. Philadelphia, p. 94, June 1865.

*Cotypes*.—Upper premolar, second left, M. C. Z. 9,129; upper premolar, second right, M. C. Z. 9,130. California, Tuolumne County, Columbia, “from auriferous clay 20 feet below the surface” (M. C. Z. 9,129); Buena Vista Lake (M. C. Z. 9,130). J. D. Whitney.

NOTE.—Gidley (Bull. Amer. Mus. Nat. Hist., 14, p. 115, 1901) selects M. C. Z. 9,129 as the type. This tooth is figured by Leidy (Rept. U. S. Geol. Surv. Terr., F. V. Hayden in charge, 1, pl. 33, figs. 1, 2, 1873) and by Gidley (*l. c.*, p. 115, fig. 10).

† *EQUUS PACIFICUS* Leidy

Proc. Acad. Nat. Sci. Philadelphia, p. 195, 1868.

*Holotype*.—Second upper molar, M. C. Z. 9,565. California, Contra Costa County, Martinez (Pleistocene). J. D. Whitney Collection.

† *HYRACOTHERIUM SIDEROLITHICUM* Pictet

Matériaux pour la Paléontol. Suisse, ser. 1, art. 2, Mémoire sur les animaux vertébrés trouvés dans le terrain sidérolithique du canton du Vaud, part 2, p. 53, pl. 4, figs. 1–4, 1855–57.

*Cotype*.—Fragment of maxilla with five teeth, M. C. Z. 5,467. The other cotype, a worn molar, is not now to be found. Switzerland, Mauremont (Eocene). Campiche Collection.

= † *Lophiotherium siderolithicum* (Pictet).

† *Lophiodon duvalii* Pomel

Arch. des Sci. Phys. et Nat. (Suppl. à la Bibl. Universelle de Génève), **4**, p. 327, 1847.

*Holotype*.—Left upper molar series, M. C. Z. 5,464. France, Passy (Middle Eocene). Duval Collection.

NOTE.—Pomel briefly characterizes this species on the basis of “communications” from M. Duval, in whose collection was “une série complète” of upper teeth. The name has been currently credited to Gervais, who described and figured Duval’s specimen (*Zoöl. et Paléontol. Françaises*, ed. 2, p. 56, pl. 17, figs. 1, 1a and explanation, 1848–52) and referred to it a lower molar in the Duval Collection (now M. C. Z. 5,464 bis) and a lower jaw figured by Blainville. Pomel’s name has priority, and was evidently based on the present specimen.

= † *Pachynolophus duralii* (Pomel).

## † BRONTOTHERIIDAE

† *Menodus dolichoceras* Scott and Osborn

Bull. Mus. Comp. Zoöl., **13**, p. 160, figs. 3 (3), 5 (3), 6 (3), September 1887.

*Holotype*.—Skull, “incomplete in the supraoccipital region, the zygomatic arch . . . fragmentary,” M. C. Z. 9,159. South Dakota, White River (Oligocene). Samuel Garman.

= † *Brontotherium dolichoceras* (Scott and Osborn).

† *Menodus platyceras* Scott and Osborn

Bull. Mus. Comp. Zoöl., **13**, p. 160, fig. 4, September 1887.

*Holotype*.—A pair of horn cores with nasal bones attached, M. C. Z. 9,160. South Dakota, White River (Oligocene). Samuel Garman.

= † *Brontotherium platyceras* (Scott and Osborn).

† *Menodus tichoceras* Scott and Osborn

Bull. Mus. Comp. Zoöl., **13**, p. 159, figs. 3 (2), 5 (2), 6 (2), September 1887.

*Holotype*.—Skull, “with the dentition complete, and lacking the upper part of the horns and the crest of the occiput,” M. C. Z. 9,158. South Dakota, White River (Oligocene). Samuel Garman.

= † *Megacerops tichoceras* (Scott and Osborn).

## † LOPHIODONTIDAE

## † LOPHIODON PARISIENSE Gervais

Zoöl. et Paléontol. Françaises, ed. 2, p. 54, pl. 17, figs. 3–10, and explanation of pl. 18, fig. 2, 1848–52.

*Cotypes*.—Eight teeth figured and described by Gervais: M. C. Z. 4,757, lower canine; M. C. Z. 4,758, last upper molar; M. C. Z. 4,760, lower canine; M. C. Z. 4,761, third upper incisor; M. C. Z. 4,764, last lower molar; M. C. Z. 4,773, penultimate upper molar; M. C. Z. 4,774, last upper molar; M. C. Z. 5,766, second upper incisor. France, Passy (Middle Eocene). Duval Collection.

NOTE.—In addition to the figured specimens, the same lot (orig. no. 72) contains eleven other teeth (M. C. Z. 4,752, 4,755, 4,756, 4,762, 4,765, 4,767, 4,768, 4,770, 4,771, 4,774) and four foot bones (M. C. Z. 4,759, 4,763, 4,769, 4,772), all of which are probably to be considered cotypes.

## † HYRACODONTIDAE

## † HYRACODON MAJOR Scott and Osborn

Bull. Mus. Comp. Zoöl., 13, p. 170, September 1887.

*Holotype*.—A carpus and its metacarpals, M. C. Z. 11,703. ?South Dakota, White River (Oligocene). July 1880. Samuel Garman.

NOTE.—In describing this species, the authors say that the type “is a fairly complete skeleton in the Princeton Museum,” which, however, is not otherwise mentioned. Their description is based wholly on the carpus and metacarpals which must, therefore, be considered the type in spite of the fact that the Princeton skeleton was so designated.

## † HYRACODON (?) PLANICEPS Scott and Osborn

Bull. Mus. Comp. Zoöl., 13, p. 170, September 1887.

*Holotype*.—Skull, lacking “most of the facial portion,” M. C. Z. 6,608. South Dakota, White River (Oligocene). July 1880. Samuel Garman.

## † METAMYNODON PLANIFRONS Scott and Osborn

Bull. Mus. Comp. Zoöl., 13, p. 165, figs. 7–9, September 1887.

*Holotype*.—Skull with anterior portion of left mandibular ramus, M. C. Z. 9,157. South Dakota, White River (Oligocene). Samuel Garman.

## RHINOCEROTIDAE

† RHINOCEROS HESPERIUS Leidy

Proc. Acad. Nat. Sci. Philadelphia, p. 177, September 1865.

*Holotype*.—Symphysis and dental portion of right ramus, M. C. Z. 9,118. California, Calaveras County, Chili Gulch (Miocene). J. D. Whitney Collection.

= † *Diceratherium hesperium* (Leidy).

## PROBOSCIDEA

† MASTODONTIDAE

† MASTODON SIMORRENSE Lartet

Notice sur la colline de Sansan, p. 24, 1851.

*Cotype*.—Upper molar series of right and left sides of same individual, M. C. Z. 9,253. France, near Sansan, Villefranche. 1848. Edouard Lartet.

NOTE.—No type is specified, but from the original label it is clear that the above specimen is the one mentioned in Lartet's description as having a "molaire de remplacement à quatre mamelons, fonctionnant simultanément avec les deux premières arrière-molaires et moins usée que celles-ci" and in which the last molar "se montre déjà en germe développé dans l'arrière de la mâchoire." It is, therefore, a cotype.

= † *Tetrabelodon angustidens* (Cuvier).

## XENARTHRA

† MEGALONYCHIDAE

† MEGALONYXX SIERRENSIS Sinclair

Univ. California Publ., Bull. Dept. Geol., 4, p. 155, pl. 20, figs. 5-8; pl. 21, figs. 1, 2; pl. 22, figs. 1-3, July 1905.

Part of holotype, lower jaws, M. C. Z. 14,986. California, Calaveras County, Mercer's Cave, near Murphys (Quaternary). 1887 and 1902. Z. A. Willard and W. J. Sinclair.

NOTE.—The species is described from the lower jaws, found in 1887 by Z. A. Willard, and from sundry other skeletal parts of the same individual discovered in 1902 by W. J. Sinclair. These latter bones are 8,130, University of California Palaeontological Collection.

† *MYLODON GARMANI* G. M. Allen

Mem. Mus. Comp. Zool., **40**, p. 319, pls. 1-4, September 1913.

*Holotype*.—Nearly perfect skull and most of the rest of the skeleton, M. C. Z. 8,429. Nebraska, Niobrara River (Pleistocene or Pliocene). 1880. Samuel Garman.

† *ORYCTEROTHERIUM OREGONENSIS* Perkins

Boston Journ. Nat. Hist., **4**, no. 1, p. 135, 1842.

*Holotype*.—Humerus, M. C. Z. 9,191. Oregon, Willamette River, lat. 44° N. (Pleistocene). December 1839. Ewing Young.

NOTE.—This specimen was figured and described, but not named, by Perkins in Amer. Journ. Sci., ser. 1, **42**, p. 136-140, figs. 2-4, 1841. Transferred to Museum of Comparative Zoölogy by Boston Society of Natural History, 1915.

= † *Mylodon harlani* Owen.

## DASYPODIDAE

## DASYPUS NOVEMCINCTUS HOPLITES G. M. Allen

Bull. Mus. Comp. Zool., **54**, p. 195, July 1911.

*Holotype*.—Female, skin and skeleton, M. C. Z. 8,116. British West Indies, Grenada, hills back of Gouyave. 7 September 1910. G. M. Allen.

## CETACEA

## † DORUDONTIDAE

## † DORUDON SERRATUS Gibbes

Proc. Acad. Nat. Sci. Philadelphia, **2**, p. 254, pl. 1, 1845.

*Holotype*.—Teeth and bone fragments, M. C. Z. 8,763. South Carolina, near the Santee Canal in a bed of Green Sand (Eocene). March 1845.

## † SQUALODONTIDAE

## † SAUROCETUS GIBBESII L. Agassiz

Proc. Acad. Nat. Sci. Philadelphia, **4**, p. 4, 1848.

*Holotype*.—A tooth lacking part of the root, M. C. Z. 8,760. South Carolina, probably Ashley River phosphates (? Eocene). Louis Agassiz. For a description of the tooth see G. M. Allen, Journ. Mammalogy, **5**, p. 120, pl. 16, May 1924.

† *SQUALODON CRASSUS* G. M. Allen

Bull. Mus. Comp. Zoöl., **67**, p. 462, pl. 5, July 1926.

*Holotype*.—Fragment from posterior part of lower mandible, M. C. Z. 16,965 (misprinted M. C. Z. 1,695 in original description). South Carolina, phosphate deposits of Ashley River, horizon probably Miocene. Robert Wilson Collection.

## INCERTAE SEDIS

† *ARCHAEODELPHIS PATRIUS* G. M. Allen

Bull. Mus. Comp. Zoöl., **65**, p. 4, pl., 1921.

*Holotype*.—Imperfect skull, M. C. Z. 15,749. Locality unknown, but probably the Eocene of southern United States, perhaps South Carolina.

## INIIDAE

† *DELPHINUS OCCIDUUS* Leidy

Proc. Acad. Nat. Sci. Philadelphia, p. 197, 1868.

*Holotype*.—Piece of dental portion of rostrum, M. C. Z. 8,765. California, Half Moon Bay (Upper Miocene). J. D. Whitney.

= † *Lonchodelphis occiduus* (Leidy). See G. M. Allen, Journ. Mammalogy, **5**, p. 194, 1924.

## ZIphiidae

† *ANOPLONASSA FORCIPATA* Cope

Proc. Amer. Phil. Soc., **11**, p. 189, pl. 5, figs. 5, 5a, 1869.

*Holotype*.—Tip of lower jaw, M. C. Z. 8,766. Georgia, near Savannah, phosphate beds (Tertiary).

## DELPHINIDAE

† *DELPHINUS CALVERTENSIS* Harlan

Bull. of Proc. Nat. Inst. Promotion Sci., no. 2, p. 195, 3 pls., 1842.

*Holotype*.—Skull lacking lower jaw, M. C. Z. 3,795. Maryland, right bank of Chesapeake Bay, Calvert Cliffs (Miocene). About 1842. Francis Markoe, Jr.

= † *Lophocetus calvertensis* (Harlan).

† *POMATODELPHIS INAEQUALIS* G. M. Allen

Journ. Mammalogy, **2**, p. 148, pl. 11, fig. 10, 19 August 1921.

*Holotype*.—Fragment of the maxilla, M. C. Z. 15,750. Florida, Brewster, Polk County, "land-pebble phosphates," probably Miocene.